

Mr. Jeffrey Crawford
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

Arcadis U.S., Inc.
300 Metro Center Boulevard
Suite 250
Warwick
Rhode Island 02886
Tel 401 738 3887
Fax 401 732 1686
www.arcadis.com

Subject:

January 2016 Quarterly Monitoring Report for Springfield Street School Complex

ENVIRONMENTAL

Dear Mr. Crawford:

ARCADIS US, Inc. (ARCADIS) conducted quarterly monitoring of soil gas, indoor air, the cap, and the sub-slab ventilation system between January 6th, 2016 and January 8th, 2015. The monitoring was performed in accordance with the *Long-Term Operation and Maintenance Plan and Site Contingency Plan (O&M Plan)* contained in the *Remedial Action Work Plan* prepared by ATC dated April 2, 1999, revised May 3, 1999 and May 9, 1999. The *Remedial Action Work Plan (RAWP)* was approved by the Rhode Island Department of Environmental Management (RIDEM) in a letter dated June 4, 1999.

Date:

February 15, 2016

Contact:

Donna H. Pallister, PE

Phone:

401.285.2235

Email:

Donna.pallister@arcadis.com

This work is subject to the Limitations contained in Attachment A. Results of monitoring are provided in the following sections and in the attachments.

Our ref:

WK012152.0010

COVER MONITORING

ARCADIS conducted a visual survey of the site on January 8th, 2016 for evidence of significant soil cover erosion, or for any areas of settling and depression.

The orange indicator barrier was not observed during the inspection, and there was no evidence of significant settling or cover erosion in need of repair.

WELL AND ROADBOX REPLACEMENT

On December 31, 2015, soil gas monitor wells WB-4, WB-6, and WB-7, which had been vandalized, were reinstalled and finished with flush mounted well boxes. The new wells were installed to 10 feet below ground surface (bgs), and screened from 5 to 10 feet bgs.

In addition, damaged well boxes for WB-5, ENE1, MG5, MG4, MG3, MG2, and MG1 were replaced. Wells MW-8, EPL3, and MPL7 were also repaired to improve security.

SUB-SLAB VENTILATION SYSTEM

Field Monitoring

The sub-slab ventilation system was inspected by ARCADIS during the quarterly monitoring on January 6th, 2016. The two elementary school blowers and one of the two middle school blowers were operating normally upon arrival. The second middle school blower, middle school back, was not operating.

Samples of influent and effluent (before and after the carbon canisters) air were collected at each functioning blower and screened for methane, carbon dioxide, oxygen, carbon monoxide, hydrogen sulfide, and organic vapors using a Landtec GEM5000 Plus and a MiniRae 2000. Results of screening are provided in Table 1. Methane, carbon monoxide, hydrogen sulfide and organic vapors were not detected in any of the samples. Carbon dioxide was detected at concentrations of 0.1% to 0.2 %; all the sample concentrations were greater than the RAWP Action Level of 1000 ppm (0.1%).

Soil Gas Laboratory Results

Sub-slab soil gas samples were collected from the influent to each functioning sub-slab ventilation system. The samples were collected in Tedlar bags and submitted to Con-Test Analytical Laboratories for analysis of volatile organic compounds (VOCs) by EPA method TO-14. Results of the analysis are summarized in Table 2, and the laboratory report is provided in Attachment B.

The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) and CT DEEP Proposed Residential Volatilization Criteria for Soil Vapor are provided in Table 2 for comparison purposes. The OSHA PELs are not directly applicable to soil gas, because it does not represent exposure point concentrations. The PELs are the average concentrations that OSHA allows to be present in a workplace without any respiratory protection or exposure controls. The concentrations detected in soil gas were well below the OSHA PELs and the CT DEEP Proposed Residential Volatilization Criteria.

INDOOR AIR MONITORING

Indoor air monitoring was conducted on January 8th, 2016 using a Landtec GEM 5000 Plus meter (methane, hydrogen sulfide, oxygen), a Mini Rae photoionization detector (organic vapors), and a Fluke 975 Airmeter (carbon dioxide, carbon monoxide). School was not in session during the monitoring event. Results of monitoring are provided in the Table 3. Carbon dioxide measurements were made with a Fluke 975 Airmeter indoor air quality meter. The Fluke 975 has a range of 0 to 5,000 ppm, with a resolution of 1 ppm.

The outside temperature on January 8th, 2016 was approximately 39°F and ambient carbon dioxide was measured at 420 ppm.

All readings were below the RAWP Action Levels. Methane and hydrogen sulfide were not detected. Carbon monoxide was only detected in the elementary school mechanical room, at a concentration of 1 ppm. Organic vapors were detected in the elementary school library at a concentration of 0.1 ppm, in the elementary school front stairs at a concentration of 0.2 ppm, and in the elementary school cafeteria at a concentration of 0.9 ppm. No evidence of a source of the PID readings was detected, and it is possible that moisture may have affected the instrument. VOCs were not detected in the subslab soil gas or soil gas monitoring points. Carbon dioxide was detected at concentrations between 625 and 897 ppm. As noted below, these readings are within the expected range for indoor air levels of carbon dioxide in an occupied building.

Concentrations of carbon dioxide inside occupied buildings are expected to be higher than the concentrations in outdoor air because the building occupants expel carbon dioxide. Therefore, in indoor air, the concentration of carbon dioxide is typically used as an indicator of the effectiveness of the heating, ventilating, and air conditioning (HVAC) system in circulating outdoor air into the building. The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) have prepared ASHRAE Standard 62.1-2007 titled *Ventilation for Acceptable Indoor Air Quality*. The purpose of the Standard is to specify minimum ventilation rates and other measures to provide indoor air quality that is acceptable to human occupants and that minimize adverse health effects. A discussion regarding carbon dioxide concentrations in indoor air contained in Informative Attachment C of the Standard states: "... maintaining a steady-state CO₂ concentration in a space of no greater than about 700 ppm above outdoor air levels will indicate that a substantial majority of visitors entering a space will be satisfied with respect to human bioeffluents (body odor)." This is the basis for ASHRAE's recommendations for concentrations of carbon dioxide in indoor air.

The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) for carbon dioxide in the workplace is 5,000 ppm. All readings were below this concentration.

The control panels for the methane monitors at both schools were inspected on December 18, 2015. The methane monitor control panels had stickers that indicated that the monitors were calibrated by Diamond Technical Services within the month prior to the inspection. Diamond Technical Services calibrates the sensors on a monthly basis.

Calibration Certificates from Diamond Calibration indicate that many of the sensors read above 0 when calibrated to the zero gas. This prevents the sensors from giving a fault alarm if the reading drops below zero due to a sudden temperature change, and still provides a conservative measure of protection because the alarm limit does not change.

GROUNDWATER MONITORING

The groundwater monitoring wells were sampled by ARCADIS on January 6th, 2016. Prior to sampling, the depth to water was gauged, and a volume of water equivalent to approximately three well volumes was removed from the well. Groundwater samples were collected in laboratory prepared sample jars and delivered under chain-of-custody protocol to Contest Laboratory in East Longmeadow, Massachusetts for analysis for volatile organic compounds by EPA method 8260. During the sampling period, MW-6 and

MW-8 were discovered dry and unable to be sampled. The laboratory report is provided as Attachment B. Results of analysis of groundwater samples are summarized in Table 4.

The only well in which target analytes were detected was ATC-4, which had 1.4 µg/L of 1,4-dichlorobenzene. There is no GB groundwater standard for 1,4 dichlorobenzene. 1,4 dichlorobenzene has been detected during previous sampling events similar concentrations. No other target analytes were detected in any of the groundwater samples collected on January 6th, 2016.

SOIL GAS MONITORING

Soil gas monitoring was conducted at 28 locations on January 6th 2016. The sampling was conducted by placing an air sampling gripper cap on each well and attaching a piece of tubing. A volume of air equivalent to approximately 3 well volumes was removed from each well using a Sensidyne BD XII air sampling pump. Soil gas was then screened using a Landtec GEM 5000 Plus Landfill Gas Analyzer and a MiniRae Photoionization Detector (PID).

Soil Gas Field Monitoring Results

Soil gas samples were screened for methane, carbon monoxide, hydrogen sulfide, carbon dioxide, oxygen, and total VOCs. During the screening, well WB-2 could not be located and was not tested. Soil gas survey results are provided in Table 5. Methane, carbon monoxide, hydrogen sulfide, and total VOCs were not detected in any samples.

Carbon dioxide was detected in soil gas at concentrations ranging from 0.1% to 4.5% during the January 2016 monitoring event. The carbon dioxide RAWP action level of 0.1% was exceeded at every monitoring point. The maximum concentration detected during the January 2016 monitoring round was 4.5%, which was lower than the maximum detected during the October 2015 round of 11.7%. This is consistent with the pattern shown during previous rounds of declining carbon dioxide concentrations in the winter, and increasing concentrations in the summer and early fall. Graphs depicting carbon dioxide, oxygen, and methane concentrations over time for selected representative wells are presented in Attachment C.

The presence of carbon dioxide in soil gas is an indicator of subsurface biological activity and does not represent a threat to users of the property. The highest concentration of carbon dioxide was found in well MPL-6, located on the northern end of the property near Hartford Avenue. The monitoring locations on the northern end of the property adjacent to large expanses of paved parking lot, sidewalk, and streets have typically had the highest carbon dioxide concentrations.

CONCLUSIONS

Methane, hydrogen sulfide, carbon monoxide and organic vapor concentrations did not exceed RAWP action levels in any soil gas or indoor air samples in this quarterly round of sampling. Carbon dioxide concentrations exceeded the action level at 33 soil gas locations and sub slab system monitoring points.

Mr. Jeffrey Crawford

February 15, 2016

The detection of carbon dioxide in soil gas is typical of what has been detected during previous monitoring events and appears to be a result of naturally occurring biological activity in the subsurface. If you have any questions or require any additional information, please contact the undersigned at 401-285-2235.

Sincerely,

Arcadis U.S., Inc.



Donna H. Pallister, PE, LSP

Senior Environmental Engineer

Copies:

A. Sepe, City of Providence
Providence Public Building Authority

Enclosures:

Tables

- 1 System Monitoring Notes
- 2 Soil Gas Lab Results
- 3 Indoor Air Monitoring Results
- 4 Groundwater Monitoring Results
- 5 Soil Gas Survey results

Figures

- 1 Site Plan

Attachments

- A. Limitations and Service Constraints
- B. Complete Lab Results
- C. Soil Gas Trends

TABLES



Table 1
System Monitoring Notes
Springfield Street School Complex
Providence, RI
1/6/2016

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM
Elementary School inlet 1	0	0.1	23.2	0	0	0
Elementary School inlet 2	0	0.2	22.6	0	0	0
Elementary School Outlet	0	0.2	22.2	0	0	0
Middle School front shed inlet	0	0.2	22.4	0	0	0
Middle School front shed after 2nd carbon	0	0.2	22.5	0	0	0
Middle School back shed inlet #	NT	NT	NT	NT	NT	NT
Middle School back shed after 2nd carbon #	NT	NT	NT	NT	NT	NT
Remedial Action Work Plan Action Levels	0.5	1,000 ppm (0.1%)	NA	9 ppm	10 ppm	5 ppm

Measurements made with: Landtec GEM5000 Plus, MiniRae 2000

Sampling date: 1/6/2016

Measured by: Kristen Audette & Jon Lewis

#- Middle school back shed not tested because blower not functioning properly

Table 2
Soil Gas Collected from System Influent
Springfield Street School Complex
Providence, RI

Parameter	Sample Date	CT DEEP Proposed Residential Volatization Criteria For Soil Vapor (ug/m3)*	OSHA PELs (ug/m3)	Middle School Back (ug/m3)	Middle School Front (ug/m3)	Elementary School #1 (ug/m3)	Elementary School #2 (ug/m3)
Benzene	9/19/14 and 9/23/14	3,247	3,000	NT	0.53	0.7	0.57
	12/19/2014			NT	0.93	0.63	0.67
	5/11/2015			NT	0.43	0.49	0.61
	6/16/2015			NT	ND	ND	ND
	10/27/2015			NT	ND	ND	0.35
	1/6/2016			NT	0.59	1	0.89
Carbon Tetrachloride	9/19/14 and 9/23/14	6,395	62,900	NT	ND	ND	ND
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	ND	ND	ND
	6/16/2015			NT	ND	ND	ND
	10/27/2015			NT	ND	ND	ND
	1/6/2016			NT	0.64	0.57	0.6
Chloroform	9/19/14 and 9/23/14	22,334	240,000	NT	ND	2.2	2.2
	12/19/2014			NT	ND	1	1.1
	5/11/2015			NT	ND	0.85	1.1
	6/16/2015			NT	ND	1.5	1.5
	10/27/2015			NT	ND	1.3	1.6
	1/6/2016			NT	0.25	1.3	1.3
Chloromethane	9/19/14 and 9/23/14	NA	207,000	NT	0.89	ND	ND
	12/19/2014			NT	1.2	ND	ND
	5/11/2015			NT	0.57	ND	ND
	6/16/2015			NT	ND	ND	ND
	10/27/2015			NT	0.51	ND	ND
	1/6/2016			NT	0.35	2.3	2.1
1,4-Dichlorobenzene	9/19/14 and 9/23/14	5,805,840	450,000	ND	ND	ND	ND
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	ND	ND	ND
	6/16/2015			NT	ND	ND	ND
	10/27/2015			NT	0.71	1	0.89
	1/6/2016			NT	1.1	0.51	0.66
Dichlorodifluoromethane (Freon 12)	9/19/14 and 9/23/14	NA	4,950,000	NT	38	3.8	3.9
	12/19/2014			NT	3.6	4.9	5
	5/11/2015			NT	3	4.1	3
	6/16/2015			NT	4.1	6.6	3.6
	10/27/2015			NT	3.7	4.2	7
	1/6/2016			NT	4.1	4.1	4.3
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	9/19/14 and 9/23/14	NA	7,000,000	NT	24	2	2
	12/19/2014			NT	ND	1	0.98
	5/11/2015			NT	0.82	2.1	1.1
	6/16/2015			NT	2.5	8.2	1.2
	10/27/2015			NT	3.9	2.5	5.6
	1/6/2016			NT	2.8	1.6	2.6
Ethylbenzene	9/19/14 and 9/23/14	7,281,812	435,000	NT	ND	ND	ND
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	2.8	2.5	3.9
	6/16/2015			NT	0.5	0.53	0.56
	10/27/2015			NT	ND	0.72	0.59
	1/6/2016			NT	0.29	0.33	0.48

Table 2
Soil Gas Collected from System Influent
Springfield Street School Complex
Providence, RI

Parameter	Sample Date	CT DEEP Proposed Residential Volatization Criteria For Soil Vapor (ug/m3)*	OSHA PELs (ug/m3)	Middle School Back (ug/m3)	Middle School Front (ug/m3)	Elementary School #1 (ug/m3)	Elementary School #2 (ug/m3)
Methylene Chloride	9/19/14 and 9/23/14	4,237,289	86,750	NT	6.7	23	20
	12/19/2014			NT	3.9	4.4	4.2
	5/11/2015			NT	ND	ND	ND
	6/16/2015			NT	110	78	64
	10/27/2015			NT	21	30	8.4
	1/6/2016			NT	4.1	2.4	2
Styrene	9/19/14 and 9/23/14	34,633	456,000	NT	4.7	3.5	2.9
	12/19/2014			NT	5	2.7	2.5
	5/11/2015			NT	30	28	34
	6/16/2015			NT	1.7	1.5	1.7
	10/27/2015			NT	30	46	27
	1/6/2016			NT	34	31	31
Tetrachloroethylene	9/19/14 and 9/23/14	75,840	678,000	NT	3.6	100	13
	12/19/2014			NT	1.8	2.8	3.3
	5/11/2015			NT	15	11	3.7
	6/16/2015			NT	3.9	23	4.8
	10/27/2015			NT	1.6	2.6	32
	1/6/2016			NT	6	2.8	19
Toluene	9/19/14 and 9/23/14	2,910,779	750,000	NT	8.3	6.6	5.9
	12/19/2014			NT	54	20	22
	5/11/2015			NT	46	41	53
	6/16/2015			NT	5.7	4.7	6.2
	10/27/2015			NT	27	36	25
	1/6/2016			NT	31	27	28
1,1,1-Trichloroethane	9/19/14 and 9/23/14	NA	1,900,000	NT	ND	0.68	ND
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	ND	ND	ND
	6/16/2015			NT	ND	ND	ND
	10/27/2015			NT	ND	ND	ND
	1/6/2016			NT	ND	ND	ND
Trichloroethylene	9/19/14 and 9/23/14	38,237	537,000	NT	ND	1.7	0.84
	12/19/2014			NT	0.82	ND	1.2
	5/11/2015			NT	ND	1.5	ND
	6/16/2015			NT	ND	2.1	ND
	10/27/2015			NT	ND	ND	4.2
	1/6/2016			NT	0.53	0.82	4.1
Trichlorofluoromethane (Freon 11)	9/19/14 and 9/23/14	NA	5,600,000	NT	7.3	4.3	6.3
	12/19/2014			NT	5	3.1	4
	5/11/2015			NT	2.7	2.6	4.5
	6/16/2015			NT	2.3	2.9	2.6
	10/27/2015			NT	2.7	3.7	3.4
	1/6/2016			NT	2.9	2.8	4
1,1,2- Trichloro-1,2,2-trifluoroethane(Freon 113)	9/19/14 and 9/23/14	NA	7,600,000	NT	0.89	ND	ND
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	ND	ND	ND
	6/16/2015			NT	ND	ND	ND
	10/27/2015			NT	ND	ND	ND
	1/6/2016			NT	0.64	0.77	0.64
1,2,4-Trimethylbenzene	9/19/14 and 9/23/14	NA	125,000	NT	ND	ND	ND
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	1.3	1.7	2.3
	6/16/2015			NT	1.6	1.5	1.5
	10/27/2015			NT	1.2	0.76	1.9
	1/6/2016			NT	0.68	0.44	0.54

Table 2
Soil Gas Collected from System Influent
Springfield Street School Complex
Providence, RI

Parameter	Sample Date	CT DEEP Proposed Residential Volatization Criteria For Soil Vapor (ug/m3)*	OSHA PELs (ug/m3)	Middle School Back (ug/m3)	Middle School Front (ug/m3)	Elementary School #1 (ug/m3)	Elementary School # 2 (ug/m3)
M/p-Xylene	9/19/14 and 9/23/14	2,215,755#	435,000	NT	1.3	1.2	1.3
	12/19/2014			NT	0.96	0.89	ND
	5/11/2015			NT	18	17	25
	6/16/2015			NT	2.4	2.4	2.6
	10/27/2015			NT	1.3	2.7	2.4
	1/6/2016			NT	1.6	1.2	1.7
o-Xylene	9/19/14 and 9/23/14	2,215,755#	435,000	NT	0.55	0.63	0.74
	12/19/2014			NT	ND	ND	ND
	5/11/2015			NT	3.6	3.5	5.4
	6/16/2015			NT	1.4	1.3	1.3
	10/27/2015			NT	0.57	1.1	0.89
	1/6/2016			NT	0.62	0.53	0.64

Notes:

Samples collected in Tedlar bags and analyzed via EPA method TO-14

Only detected compounds are listed, see laboratory certificate for complete list of analyses

OSHA PELs = Occupational Safety and Health Administration Permissible Exposure Limits

CT DEEP= Connecticut Department of Energy and Environmental Protection

ug/m3 = micrograms per cubic meter

* From Appendix F to Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies

#- Represents Total Xylenes

Results prior to September 2014 not shown.

Table 3
Indoor Air Monitoring Results
Springfield Street School Complex
Providence, RI
1/8/2016

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide PPM	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM
E.S. Front office	0	895	22.8	0	0	0
E.S. Elevator	0	875	22.8	0	0	0
E.S. Faculty Work Room	0	911	22.8	0	0	0
E.S. Gym	0	897	22.4	0	0	0
E.S. Stairway B	0	759	22.6	0	0	0
E.S. Stairway C	0	747	21.8	0	0	0
E.S. Library	0	625	22	0	0	0.1
E.S. Front Stairs	0	869	21.8	0	0	0.2
E.S. Cafeteria	0	873	21.6	0	0	0.9
E.S. Mechanical Room	0	745	22.2	1	0	0
M.S. Front Office	0	715	23.7	0	0	0
M.S. Elevator	0	806	23.1	0	0	0
M.S. Stairway near Elem. School GS-01	0	863	22.7	0	0	0
M.S. Near sensor #16 in hall outside cafeteria	0	850	22	0	0	0
M.S. Faculty Work Room	0	881	23.5	0	0	0
M.S. Sensor #15 Outside Gym	0	708	22.1	0	0	0
M.S. GS-03 Across from Boys Bathroom	0	831	23	0	0	0
M.S. Gym	0	819	22	0	0	0
M.S. Outside of Music Room	0	735	22.2	0	0	0
M.S. Cafeteria	0	826	21.9	0	0	0
M.S. Front Hall near sensor #4	0	737	23.6	0	0	0
M.S. Hallway across from elevator near sensor #9	0	637	23.3	0	0	0
M.S. Near sensor GS 06 hallway right end	0	744	22.5	0	0	0
M.S. stairway near Hartford Ave. sensor GS-7	0	825	22.4	0	0	0
Remedial Action Work Plan Action Levels	0.5	1,000 ppm (0.1%)	NA	9 ppm	10 ppm	5 ppm

Notes: The indoor air quality monitoring panels in the M.S. and E.S. were calibrated on 12/18/2015.
E.S. indicates Elementary School, M.S. indicates Middle School
Measurements made with: MiniRae photoionization detector, Fluke 975 Airmeter, Landtec Gem 5000 Plus
PPM = Parts per million
Outdoor conditions: carbon dioxide = 420 ppm temperature = 39 degrees F

Table 4
Groundwater Monitoring Results
Springfield Street School Complex
Providence, RI

Sampling Dates and Results in µg/L		Sampling Dates and Results in µg/L						RIDEM GB Groundwater Objective
Well ID	Detected Compounds	9/19/2014	12/18/2014	4/2/2015	6/15/2015	10/29/2015	1/6/2016	
ATC-1	Chloromethane	ND	ND	ND	4.1	ND	ND	
ATC-2		Closed	Closed	Closed	Closed	Closed	Closed	
MW-6	Chloroform	4.1	ND	ND	ND	NS	NS	NA
ATC-3		Closed	Closed	Closed	Closed	Closed	Closed	
MW-7		ND	ND	ND	ND	ND	ND	
ATC-4	Chlorobenzene	ND	ND	ND	ND	1.2	ND	70
	1,4-dichlorobenzene	2	1.2	ND	ND	1.8	1.4	NA
ATC-5		Closed	Closed	Closed	Closed	Closed	Closed	
MW-8		ND	ND	ND	ND	NS	NS	
Sampled By:		ARCADIS	ARCADIS	ARCADIS	ARCADIS	ARCADIS	ARCADIS	

ND = not detected above method detection limit
 NS = not sampled
 NA = No applicable standard published
 MTBE = Methyl tert-Butyl Ether
 µg/L = micrograms per liter
 Samples collected prior to 9/19/14 and after 2009 are hidden.

Table 5
Soil Gas Survey
Springfield Street School Complex
Providence, RI
1/6/2016

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM
WB-1	0	2.1	20.4	0	0	0
WB-2	NT	NT	NT	NT	NT	NT
WB-3	0	0.1	22.8	0	0	0
WB-4	0	0.1	23.3	0	0	0
WB-5	0	0.1	23.6	0	0	0
WB-6	0	0.1	23.7	0	0	0
WB-7	0	0.1	23.6	0	0	0
WB-8	0	0.1	23.6	0	0	0
WB-12	0	0.5	22.8	0	0	0
WB-13	0	0.3	23	0	0	0
WB-14	0	1.6	20.5	0	0	0
WB-15	0	0.6	23.1	0	0	0
EPL-1	0	0.1	21.7	0	0	0
EPL-2	0	0.1	22	0	0	0
EPL-3	0	1.2	21	0	0	0
EPL-4	0	2.1	19	0	0	0
EPL-5	0	1.6	20	0	0	0
ENE-1	0	0.1	21.9	0	0	0
MG1	0	0.6	20.4	0	0	0
MG2	0	0.4	21.4	0	0	0
MG3	0	0.1	22.4	0	0	0
MG4	0	0.5	22.5	0	0	0
MG5	0	1.4	21.5	0	0	0
MPL2	0	0.3	21.6	0	0	0
MPL3	0	1.4	20.7	0	0	0
MPL5	0	0.7	19.6	0	0	0
MPL6	0	4.5	15	0	0	0
MPL7	0	2.4	19.4	0	0	0
MPL8	0	0.6	20.6	0	0	0
Remedial Action Work Plan Action Levels	0.5	1,000 ppm (0.1%)	NA	9 ppm	10 ppm	5 ppm

Sampled by: Kristen Audette
Weather Conditions: 1/6/2016 -Clear, 35 F
Sampling Equipment: Landtec GEM 5000 Plus, MiniRae 2000 PID
NT = Not tested

FIGURES
















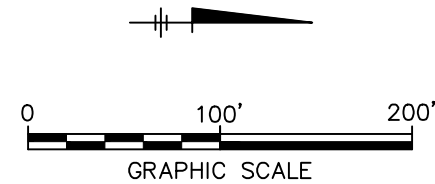
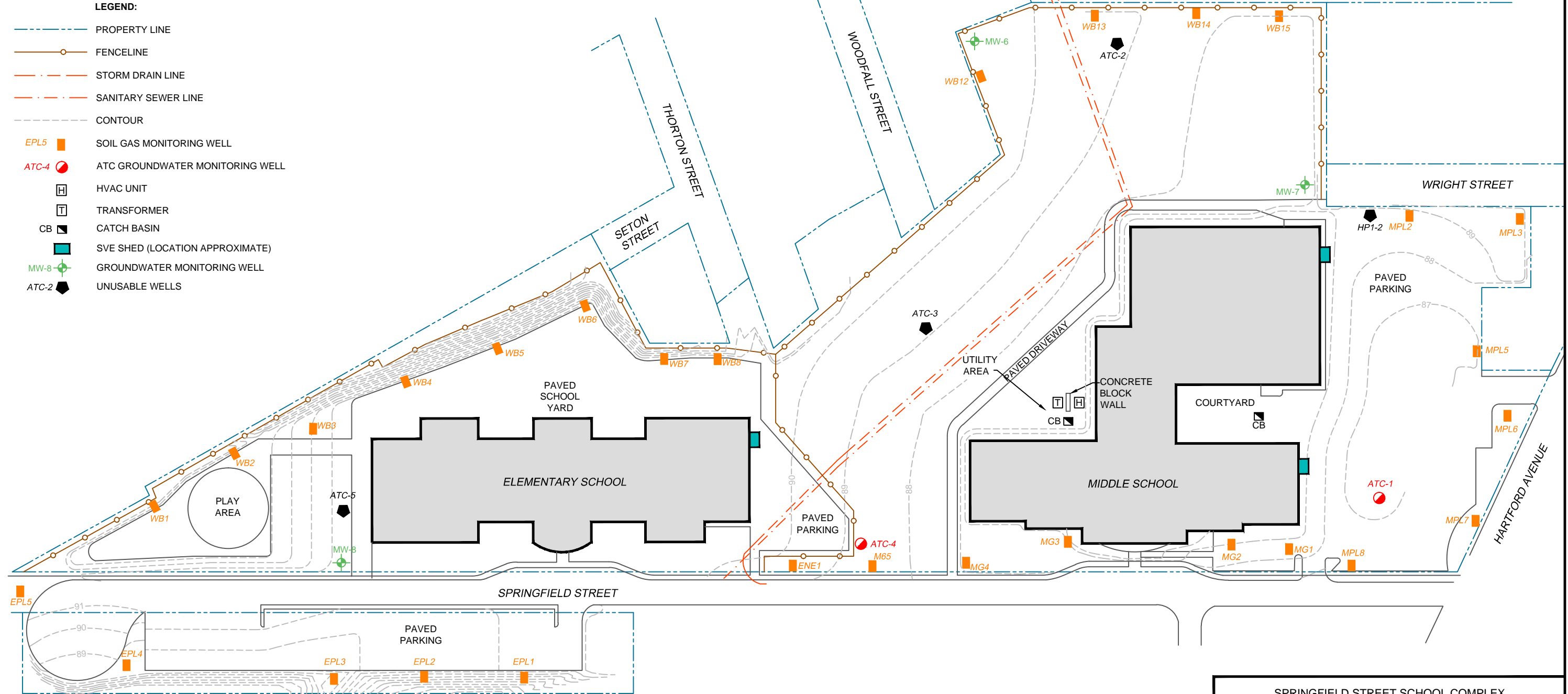
NOTES:


THE FOLLOWING MAP IS REFERENCED: ELEMENTARY & MIDDLE SCHOOLS, PROVIDENCE RHODE ISLAND, ISSUED FOR, CITY OF PROVIDENCE, GRADING AND SAMPLING LOCATION PLAN, PREPARED BY NORTHEAST ENGINEERS & CONSULTANTS, INC., DATED MAY 19, 1999, SCALE: 1"=50'.

THIS MAP HAS BEEN DIGITIZED FROM THE ABOVE REFERENCED MAP, AND SCALE IS APPROXIMATE. FOR USE WITH LFR REPORT ONLY.

LEGEND:

-  PROPERTY LINE
-  FENCELINE
-  STORM DRAIN LINE
-  SANITARY SEWER LINE
-  CONTOUR
-  EPL5 SOIL GAS MONITORING WELL
-  ATC-4 ATC GROUNDWATER MONITORING WELL
-  HVAC UNIT
-  TRANSFORMER
-  CATCH BASIN
-  SVE SHED (LOCATION APPROXIMATE)
-  MW-8 GROUNDWATER MONITORING WELL
-  ATC-2 UNUSABLE WELLS



SPRINGFIELD STREET SCHOOL COMPLEX SPRINGFIELD STREET PROVIDENCE, RHODE ISLAND	
<h2 style="margin: 0;">SITE PLAN</h2>	
	FIGURE <h1 style="margin: 0;">1</h1>

ATTACHMENT A

Limitations and Service Constraints



LIMITATIONS AND SERVICE CONSTRAINTS

GENERAL REPORTS/DOCUMENT

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ARCADIS and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, express or implied, is intended or given. To the extent that ARCADIS relied upon any information prepared by other parties not under contract to ARCADIS, ARCADIS makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

Results of any investigations or testing and any findings presented in this report apply solely to conditions existing at the time when ARCADIS' investigative work was performed. It must be recognized that any such investigative or testing activities are inherently limited and do not represent a conclusive or complete characterization. Conditions in other parts of the project site may vary from those at the locations where data were collected. ARCADIS's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100% confidence in environmental investigation conclusions cannot reasonably be achieved.

ARCADIS, therefore, does not provide any guarantees, certifications, or warranties regarding any conclusions regarding environmental contamination of any such property. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

ATTACHMENT B

Complete Lab Results



January 11, 2016

Donna Pallister
Arcadis US, Inc. - Warwick, RI
300 Metro Center Blvd., Suite 250
Warwick, RI 02886

Project Location: Springfield St. School Complex. Prov, RI
Client Job Number:
Project Number: WK012152.0007
Laboratory Work Order Number: 16A0184

Enclosed are results of analyses for samples received by the laboratory on January 7, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Aaron L. Benoit
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
16A0184-01	5
16A0184-02	7
16A0184-04	9
16A0184-05	11
Sample Preparation Information	13
QC Data	14
Volatile Organic Compounds by GC/MS	14
B139337	14
Flag/Qualifier Summary	19
Certifications	20
Chain of Custody/Sample Receipt	22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Warwick, RI
300 Metro Center Blvd., Suite 250
Warwick, RI 02886
ATTN: Donna Pallister

REPORT DATE: 1/11/2016

PURCHASE ORDER NUMBER: 5131

PROJECT NUMBER: WK012152.0007

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16A0184

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Springfield St. School Complex. Prov, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-7	16A0184-01	Ground Water		SW-846 8260C	
ATC-4	16A0184-02	Ground Water		SW-846 8260C	
ATC-1	16A0184-04	Ground Water		SW-846 8260C	
Trip Blank	16A0184-05	Trip Blank Water		SW-846 8260C	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8260C

Qualifications:**L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Dichlorodifluoromethane (Freon 1:**

16A0184-01[MW-7], 16A0184-02[ATC-4], 16A0184-04[ATC-1], 16A0184-05[Trip Blank], B139337-BLK1, B139337-BS1, B139337-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB**

B139337-BSD1

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB**

16A0184-01[MW-7], 16A0184-02[ATC-4], 16A0184-04[ATC-1], 16A0184-05[Trip Blank], B139337-BLK1, B139337-BS1, B139337-BSD1

Bromoform

16A0184-01[MW-7], 16A0184-02[ATC-4], 16A0184-04[ATC-1], 16A0184-05[Trip Blank], B139337-BLK1, B139337-BS1, B139337-BSD1

trans-1,4-Dichloro-2-butene

16A0184-01[MW-7], 16A0184-02[ATC-4], 16A0184-04[ATC-1], 16A0184-05[Trip Blank], B139337-BLK1, B139337-BS1, B139337-BSD1

V-20

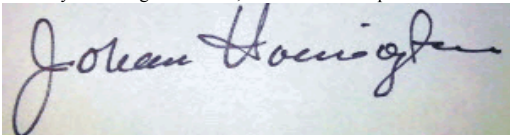
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Chloromethane**

B139337-BS1, B139337-BSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington

Manager, Laboratory Reporting

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: MW-7

Sampled: 1/6/2016 10:30

Sample ID: 16A0184-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: MW-7

Sampled: 1/6/2016 10:30

Sample ID: 16A0184-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 19:38	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.8	70-130	1/8/16 19:38
Toluene-d8	102	70-130	1/8/16 19:38
4-Bromofluorobenzene	100	70-130	1/8/16 19:38

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: ATC-4

Sampled: 1/6/2016 11:40

Sample ID: 16A0184-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,4-Dichlorobenzene	1.4	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: ATC-4

Sampled: 1/6/2016 11:40

Sample ID: 16A0184-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:05	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.8	70-130	1/8/16 20:05
Toluene-d8	103	70-130	1/8/16 20:05
4-Bromofluorobenzene	100	70-130	1/8/16 20:05

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: ATC-1

Sampled: 1/6/2016 13:50

Sample ID: 16A0184-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: ATC-1

Sampled: 1/6/2016 13:50

Sample ID: 16A0184-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 20:58	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.8	70-130	1/8/16 20:58
Toluene-d8	101	70-130	1/8/16 20:58
4-Bromofluorobenzene	101	70-130	1/8/16 20:58

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: Trip Blank

Sampled: 1/6/2016 00:00

Sample ID: 16A0184-05

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Springfield St. School Complex. P

Sample Description:

Work Order: 16A0184

Date Received: 1/7/2016

Field Sample #: Trip Blank

Sampled: 1/6/2016 00:00

Sample ID: 16A0184-05

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 16:32	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.1	70-130	1/8/16 16:32
Toluene-d8	102	70-130	1/8/16 16:32
4-Bromofluorobenzene	100	70-130	1/8/16 16:32

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16A0184-01 [MW-7]	B139337	5	5.00	01/08/16
16A0184-02 [ATC-4]	B139337	5	5.00	01/08/16
16A0184-04 [ATC-1]	B139337	5	5.00	01/08/16
16A0184-05 [Trip Blank]	B139337	5	5.00	01/08/16

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B139337 - SW-846 5030B

Blank (B139337-BLK1)

Prepared & Analyzed: 01/08/16

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							V-05
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							V-05
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							L-04
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B139337 - SW-846 5030B

Blank (B139337-BLK1)

Prepared & Analyzed: 01/08/16

Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	3.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	24.1		µg/L	25.0		96.3	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.6	70-130			

LCS (B139337-BS1)

Prepared & Analyzed: 01/08/16

Acetone	76.6	50	µg/L	100		76.6	70-160			†
Acrylonitrile	9.70	5.0	µg/L	10.0		97.0	70-130			
tert-Amyl Methyl Ether (TAME)	9.12	0.50	µg/L	10.0		91.2	70-130			
Benzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130			
Bromochloromethane	11.7	1.0	µg/L	10.0		117	70-130			
Bromodichloromethane	9.43	0.50	µg/L	10.0		94.3	70-130			
Bromoform	8.13	1.0	µg/L	10.0		81.3	70-130		V-05	
Bromomethane	7.45	2.0	µg/L	10.0		74.5	40-160			†
2-Butanone (MEK)	85.3	20	µg/L	100		85.3	40-160			†
tert-Butyl Alcohol (TBA)	75.8	20	µg/L	100		75.8	40-160			†
n-Butylbenzene	9.86	1.0	µg/L	10.0		98.6	70-130			
sec-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
tert-Butylbenzene	9.88	1.0	µg/L	10.0		98.8	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.76	0.50	µg/L	10.0		97.6	70-130			
Carbon Disulfide	7.73	4.0	µg/L	10.0		77.3	70-130			
Carbon Tetrachloride	9.21	5.0	µg/L	10.0		92.1	70-130			
Chlorobenzene	9.84	1.0	µg/L	10.0		98.4	70-130			
Chlorodibromomethane	8.76	0.50	µg/L	10.0		87.6	70-130			
Chloroethane	10.3	2.0	µg/L	10.0		103	70-130			
Chloroform	9.73	2.0	µg/L	10.0		97.3	70-130			
Chloromethane	9.35	2.0	µg/L	10.0		93.5	40-160			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B139337 - SW-846 5030B										
LCS (B139337-BS1)										
Prepared & Analyzed: 01/08/16										
2-Chlorotoluene	9.96	1.0	µg/L	10.0		99.6	70-130			
4-Chlorotoluene	9.83	1.0	µg/L	10.0		98.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.15	5.0	µg/L	10.0		71.5	70-130			V-05
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130			
Dibromomethane	9.95	1.0	µg/L	10.0		99.5	70-130			
1,2-Dichlorobenzene	9.45	1.0	µg/L	10.0		94.5	70-130			
1,3-Dichlorobenzene	9.89	1.0	µg/L	10.0		98.9	70-130			
1,4-Dichlorobenzene	9.19	1.0	µg/L	10.0		91.9	70-130			
trans-1,4-Dichloro-2-butene	7.35	2.0	µg/L	10.0		73.5	70-130			V-05
Dichlorodifluoromethane (Freon 12)	3.87	2.0	µg/L	10.0		38.7 *	40-160			L-04 †
1,1-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dichloroethane	9.77	1.0	µg/L	10.0		97.7	70-130			
1,1-Dichloroethylene	9.75	1.0	µg/L	10.0		97.5	70-130			
cis-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
trans-1,2-Dichloroethylene	9.73	1.0	µg/L	10.0		97.3	70-130			
1,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130			
1,3-Dichloropropane	10.2	0.50	µg/L	10.0		102	70-130			
2,2-Dichloropropane	9.21	1.0	µg/L	10.0		92.1	40-130			†
1,1-Dichloropropene	9.77	2.0	µg/L	10.0		97.7	70-130			
cis-1,3-Dichloropropene	9.14	0.50	µg/L	10.0		91.4	70-130			
trans-1,3-Dichloropropene	9.76	0.50	µg/L	10.0		97.6	70-130			
Diethyl Ether	9.74	2.0	µg/L	10.0		97.4	70-130			
Diisopropyl Ether (DIPE)	9.60	0.50	µg/L	10.0		96.0	70-130			
1,4-Dioxane	80.0	50	µg/L	100		80.0	40-130			†
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Hexachlorobutadiene	9.84	0.50	µg/L	10.0		98.4	70-130			
2-Hexanone (MBK)	91.3	10	µg/L	100		91.3	70-160			†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0		101	70-130			
p-Isopropyltoluene (p-Cymene)	10.7	1.0	µg/L	10.0		107	70-130			
Methyl tert-Butyl Ether (MTBE)	9.13	1.0	µg/L	10.0		91.3	70-130			
Methylene Chloride	10.6	5.0	µg/L	10.0		106	70-130			
4-Methyl-2-pentanone (MIBK)	96.2	10	µg/L	100		96.2	70-160			†
Naphthalene	8.77	2.0	µg/L	10.0		87.7	40-130			†
n-Propylbenzene	9.98	1.0	µg/L	10.0		99.8	70-130			
Styrene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1,2-Tetrachloroethane	9.64	1.0	µg/L	10.0		96.4	70-130			
1,1,2,2-Tetrachloroethane	9.88	0.50	µg/L	10.0		98.8	70-130			
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
Tetrahydrofuran	9.85	10	µg/L	10.0		98.5	70-130			
Toluene	10.6	1.0	µg/L	10.0		106	70-130			
1,2,3-Trichlorobenzene	9.43	5.0	µg/L	10.0		94.3	70-130			
1,2,4-Trichlorobenzene	9.70	1.0	µg/L	10.0		97.0	70-130			
1,3,5-Trichlorobenzene	9.10	1.0	µg/L	10.0		91.0	70-130			
1,1,1-Trichloroethane	9.05	1.0	µg/L	10.0		90.5	70-130			
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Trichlorofluoromethane (Freon 11)	8.04	2.0	µg/L	10.0		80.4	70-130			
1,2,3-Trichloropropane	9.63	2.0	µg/L	10.0		96.3	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.17	1.0	µg/L	10.0		91.7	70-130			
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B139337 - SW-846 5030B										
LCS (B139337-BS1)										
Prepared & Analyzed: 01/08/16										
Vinyl Chloride	7.08	2.0	µg/L	10.0		70.8	40-160			†
m+p Xylene	20.3	2.0	µg/L	20.0		102	70-130			
o-Xylene	10.0	1.0	µg/L	10.0		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.9		µg/L	25.0		99.5	70-130			
Surrogate: Toluene-d8	26.0		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		100	70-130			
LCS Dup (B139337-BSD1)										
Prepared & Analyzed: 01/08/16										
Acetone	70.3	50	µg/L	100		70.3	70-160	8.55	25	†
Acrylonitrile	9.15	5.0	µg/L	10.0		91.5	70-130	5.84	25	
tert-Amyl Methyl Ether (TAME)	8.99	0.50	µg/L	10.0		89.9	70-130	1.44	25	
Benzene	9.99	1.0	µg/L	10.0		99.9	70-130	1.10	25	
Bromobenzene	10.3	1.0	µg/L	10.0		103	70-130	0.195	25	
Bromochloromethane	12.0	1.0	µg/L	10.0		120	70-130	2.95	25	
Bromodichloromethane	8.85	0.50	µg/L	10.0		88.5	70-130	6.35	25	
Bromoform	8.02	1.0	µg/L	10.0		80.2	70-130	1.36	25	V-05
Bromomethane	8.40	2.0	µg/L	10.0		84.0	40-160	12.0	25	†
2-Butanone (MEK)	76.6	20	µg/L	100		76.6	40-160	10.8	25	†
tert-Butyl Alcohol (TBA)	71.9	20	µg/L	100		71.9	40-160	5.36	25	†
n-Butylbenzene	9.25	1.0	µg/L	10.0		92.5	70-130	6.38	25	
sec-Butylbenzene	9.74	1.0	µg/L	10.0		97.4	70-130	5.30	25	
tert-Butylbenzene	9.50	1.0	µg/L	10.0		95.0	70-130	3.92	25	
tert-Butyl Ethyl Ether (TBEE)	9.63	0.50	µg/L	10.0		96.3	70-130	1.34	25	
Carbon Disulfide	7.36	4.0	µg/L	10.0		73.6	70-130	4.90	25	
Carbon Tetrachloride	9.28	5.0	µg/L	10.0		92.8	70-130	0.757	25	
Chlorobenzene	9.80	1.0	µg/L	10.0		98.0	70-130	0.407	25	
Chlorodibromomethane	8.60	0.50	µg/L	10.0		86.0	70-130	1.84	25	
Chloroethane	10.2	2.0	µg/L	10.0		102	70-130	1.07	25	
Chloroform	9.63	2.0	µg/L	10.0		96.3	70-130	1.03	25	
Chloromethane	10.2	2.0	µg/L	10.0		102	40-160	8.60	25	V-20 †
2-Chlorotoluene	9.94	1.0	µg/L	10.0		99.4	70-130	0.201	25	
4-Chlorotoluene	9.62	1.0	µg/L	10.0		96.2	70-130	2.16	25	
1,2-Dibromo-3-chloropropane (DBCP)	6.51	5.0	µg/L	10.0		65.1 *	70-130	9.37	25	L-07, V-05
1,2-Dibromoethane (EDB)	9.54	0.50	µg/L	10.0		95.4	70-130	5.90	25	
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130	1.30	25	
1,2-Dichlorobenzene	9.09	1.0	µg/L	10.0		90.9	70-130	3.88	25	
1,3-Dichlorobenzene	9.37	1.0	µg/L	10.0		93.7	70-130	5.40	25	
1,4-Dichlorobenzene	9.20	1.0	µg/L	10.0		92.0	70-130	0.109	25	
trans-1,4-Dichloro-2-butene	7.17	2.0	µg/L	10.0		71.7	70-130	2.48	25	V-05
Dichlorodifluoromethane (Freon 12)	3.80	2.0	µg/L	10.0		38.0 *	40-160	1.83	25	L-04 †
1,1-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130	0.193	25	
1,2-Dichloroethane	9.69	1.0	µg/L	10.0		96.9	70-130	0.822	25	
1,1-Dichloroethylene	9.68	1.0	µg/L	10.0		96.8	70-130	0.721	25	
cis-1,2-Dichloroethylene	9.73	1.0	µg/L	10.0		97.3	70-130	3.63	25	
trans-1,2-Dichloroethylene	9.60	1.0	µg/L	10.0		96.0	70-130	1.35	25	
1,2-Dichloropropane	10.2	1.0	µg/L	10.0		102	70-130	1.65	25	
1,3-Dichloropropane	10.1	0.50	µg/L	10.0		101	70-130	1.48	25	
2,2-Dichloropropane	9.00	1.0	µg/L	10.0		90.0	40-130	2.31	25	†
1,1-Dichloropropene	9.83	2.0	µg/L	10.0		98.3	70-130	0.612	25	
cis-1,3-Dichloropropene	9.02	0.50	µg/L	10.0		90.2	70-130	1.32	25	
trans-1,3-Dichloropropene	9.19	0.50	µg/L	10.0		91.9	70-130	6.02	25	
Diethyl Ether	9.86	2.0	µg/L	10.0		98.6	70-130	1.22	25	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B139337 - SW-846 5030B										
LCS Dup (B139337-BSD1)										
Prepared & Analyzed: 01/08/16										
Diisopropyl Ether (DIPE)	9.41	0.50	µg/L	10.0		94.1	70-130	2.00	25	
1,4-Dioxane	67.0	50	µg/L	100		67.0	40-130	17.7	50	† ‡
Ethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	1.86	25	
Hexachlorobutadiene	9.41	0.50	µg/L	10.0		94.1	70-130	4.47	25	
2-Hexanone (MBK)	83.5	10	µg/L	100		83.5	70-160	8.93	25	†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0		101	70-130	0.792	25	
p-Isopropyltoluene (p-Cymene)	10.3	1.0	µg/L	10.0		103	70-130	3.24	25	
Methyl tert-Butyl Ether (MTBE)	8.80	1.0	µg/L	10.0		88.0	70-130	3.68	25	
Methylene Chloride	10.8	5.0	µg/L	10.0		108	70-130	1.68	25	
4-Methyl-2-pentanone (MIBK)	90.3	10	µg/L	100		90.3	70-160	6.35	25	†
Naphthalene	7.96	2.0	µg/L	10.0		79.6	40-130	9.68	25	†
n-Propylbenzene	9.84	1.0	µg/L	10.0		98.4	70-130	1.41	25	
Styrene	9.98	1.0	µg/L	10.0		99.8	70-130	2.08	25	
1,1,1,2-Tetrachloroethane	9.51	1.0	µg/L	10.0		95.1	70-130	1.36	25	
1,1,2,2-Tetrachloroethane	9.53	0.50	µg/L	10.0		95.3	70-130	3.61	25	
Tetrachloroethylene	9.95	1.0	µg/L	10.0		99.5	70-130	3.84	25	
Tetrahydrofuran	9.48	10	µg/L	10.0		94.8	70-130	3.83	25	
Toluene	10.3	1.0	µg/L	10.0		103	70-130	2.30	25	
1,2,3-Trichlorobenzene	8.44	5.0	µg/L	10.0		84.4	70-130	11.1	25	
1,2,4-Trichlorobenzene	9.16	1.0	µg/L	10.0		91.6	70-130	5.73	25	
1,3,5-Trichlorobenzene	8.50	1.0	µg/L	10.0		85.0	70-130	6.82	25	
1,1,1-Trichloroethane	9.03	1.0	µg/L	10.0		90.3	70-130	0.221	25	
1,1,2-Trichloroethane	9.85	1.0	µg/L	10.0		98.5	70-130	5.43	25	
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	0.863	25	
Trichlorofluoromethane (Freon 11)	8.04	2.0	µg/L	10.0		80.4	70-130	0.00	25	
1,2,3-Trichloropropane	9.51	2.0	µg/L	10.0		95.1	70-130	1.25	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.35	1.0	µg/L	10.0		93.5	70-130	1.94	25	
1,2,4-Trimethylbenzene	9.81	1.0	µg/L	10.0		98.1	70-130	2.71	25	
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130	1.34	25	
Vinyl Chloride	7.09	2.0	µg/L	10.0		70.9	40-160	0.141	25	†
m+p Xylene	20.5	2.0	µg/L	20.0		102	70-130	0.980	25	
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130	0.893	25	
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0		99.2	70-130			
Surrogate: Toluene-d8	25.7		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	25.5		µg/L	25.0		102	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Acetone	CT,NY,ME,NH,VA
Acrylonitrile	CT,NY,ME,NH,VA
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA
Benzene	CT,NY,ME,NH,VA
Bromochloromethane	NY,ME,NH,VA
Bromodichloromethane	CT,NY,ME,NH,VA
Bromoform	CT,NY,ME,NH,VA
Bromomethane	CT,NY,ME,NH,VA
2-Butanone (MEK)	CT,NY,ME,NH,VA
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA
n-Butylbenzene	NY,ME,VA
sec-Butylbenzene	NY,ME,VA
tert-Butylbenzene	NY,ME,VA
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA
Carbon Disulfide	CT,NY,ME,NH,VA
Carbon Tetrachloride	CT,NY,ME,NH,VA
Chlorobenzene	CT,NY,ME,NH,VA
Chlorodibromomethane	CT,NY,ME,NH,VA
Chloroethane	CT,NY,ME,NH,VA
Chloroform	CT,NY,ME,NH,VA
Chloromethane	CT,NY,ME,NH,VA
2-Chlorotoluene	NY,ME,NH,VA
4-Chlorotoluene	NY,ME,NH,VA
Dibromomethane	NY,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,ME,NH,VA
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA
1,1-Dichloroethane	CT,NY,ME,NH,VA
1,2-Dichloroethane	CT,NY,ME,NH,VA
1,1-Dichloroethylene	CT,NY,ME,NH,VA
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA
1,2-Dichloropropane	CT,NY,ME,NH,VA
1,3-Dichloropropane	NY,ME,VA
2,2-Dichloropropane	NY,ME,NH,VA
1,1-Dichloropropene	NY,ME,NH,VA
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA
Diisopropyl Ether (DIPE)	NY,ME,NH,VA
Ethylbenzene	CT,NY,ME,NH,VA
Hexachlorobutadiene	CT,NY,ME,NH,VA
2-Hexanone (MBK)	CT,NY,ME,NH,VA
Isopropylbenzene (Cumene)	NY,ME,VA
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA

CERTIFICATIONS

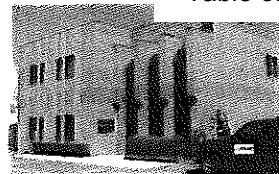
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Methylene Chloride	CT,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA
Naphthalene	NY,ME,NH,VA
n-Propylbenzene	CT,NY,ME,NH,VA
Styrene	CT,NY,ME,NH,VA
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA
Tetrachloroethylene	CT,NY,ME,NH,VA
Toluene	CT,NY,ME,NH,VA
1,2,3-Trichlorobenzene	NY,ME,NH,VA
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA
1,1,2-Trichloroethane	CT,NY,ME,NH,VA
Trichloroethylene	CT,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA
1,2,3-Trichloropropane	NY,ME,NH,VA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA
1,2,4-Trimethylbenzene	NY,ME,VA
1,3,5-Trimethylbenzene	NY,ME,VA
Vinyl Chloride	CT,NY,ME,NH,VA
m+p Xylene	CT,NY,ME,NH,VA
o-Xylene	CT,NY,ME,NH,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

39 Spruce St.
 East Longmeadow, MA. 01028
 P: 413-525-2332
 F: 413-525-6405
 www.contestlabs.com



Sample Receipt Checklist

CLIENT NAME: Arcadis RECEIVED BY: VP DATE: 1/7/16

- 1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
- 2) Does the chain agree with the samples? Yes No
If not, explain:
- 3) Are all the samples in good condition? Yes No
If not, explain:

4) How were the samples received:

On Ice Direct from Sampling Ambient In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.3

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

7) Location where samples are stored:

14

Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	14	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl 14 # Methanol _____
 # Bisulfate _____ # DI Water _____
 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist
 (Rejection Criteria Listing - Using Sample Acceptance Policy)
 Any False statement will be brought to the attention of Client

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	N T VP	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Doc #277 Rev. 4 August 2013 Who notified of False statements? Date/Time:
 Log-In Technician Initials: VP Date/Time: 1/7/16 1730

Aaron Benoit

From: Pallister, Donna [Donna.Pallister@arcadis.com]
Sent: Friday, January 08, 2016 9:59 AM
To: Aaron Benoit
Subject: FW: Login Notification: 16A0184
Attachments: 16A0184 01 08 16 0937_01.PDF

Aaron,

Can you please cancel the analysis of the field blank on this chain.

Thank you,
Donna

Donna Pallister, PE, LSP | Principal Engineer | Donna.Pallister@Arcadis.com Arcadis | Arcadis US, Inc.
300 Metro Center Blvd, Suite 250, Warwick, RI | 02886 | USA T. +1 401 738 3887 x25 | M. +1 401 255 9619

Professional Registration / PE-RI 5659, LSP-MA 7669

Connect with us! www.arcadis.com | LinkedIn | Twitter | Facebook

Be green, leave it on the screen.

-----Original Message-----

From: Con-Test Reports (Unattended Mailbox - Do Not Reply) [<mailto:reports@contestlabs.com>]
Sent: Friday, January 08, 2016 9:47 AM
To: Pallister, Donna <Donna.Pallister@arcadis.com>
Subject: Login Notification: 16A0184

This is an automated message from the Element DataSystem(r) LIMS at Con-Test Analytical Laboratory. If you have any questions about this email or if this email has been sent to you in error, please contact:

Con-Test Analytical Laboratory
39 Spruce Street
East Longmeadow, MA 01028
413.525.2332 Phone
413.525.6405 Fax

Submitting Client: Arcadis US, Inc. - Warwick, RI Project Name: Springfield St.

This e-mail and any files transmitted with it are the property of Arcadis. All rights, including without limitation copyright, are reserved. This e-mail contains information which may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not the intended recipient(s) please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error please return it to the sender and then delete the e-mail and destroy any copies of it. Whilst reasonable precautions have been taken to ensure no software viruses are present in our emails we cannot guarantee that this e-mail or any attachment is virus-free or has not been

intercepted or changed. Any opinions or other information in this e-mail that do not relate to the official business of Arcadis are neither given nor endorsed by it.

January 14, 2016

Donna Pallister
Arcadis US, Inc. - Warwick, RI
300 Metro Center Blvd., Suite 250
Warwick, RI 02886

Project Location: Springfield St. School Complex. Prov, RI
Client Job Number:
Project Number: WK012152.0007
Laboratory Work Order Number: 16A0185

Enclosed are results of analyses for samples received by the laboratory on January 7, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron L. Benoit", with a horizontal line extending to the right from the end of the signature.

Aaron L. Benoit
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
Sample Preparation Information	11
QC Data	12
Air Toxics by EPA Compendium Methods	12
B139731	12
Flag/Qualifier Summary	14
Certifications	15
Chain of Custody/Sample Receipt	17

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Warwick, RI
300 Metro Center Blvd., Suite 250
Warwick, RI 02886
ATTN: Donna Pallister

REPORT DATE: 1/14/2016

PURCHASE ORDER NUMBER: 5131

PROJECT NUMBER: WK012152.0007

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16A0185

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Springfield St. School Complex. Prov, RI

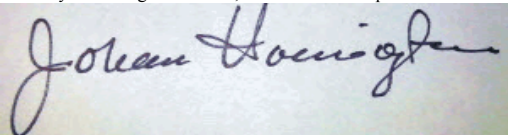
FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MS Front	16A0185-01	Sub Slab		EPA TO-14A	
ES #1	16A0185-02	Sub Slab		EPA TO-14A	
ES #2	16A0185-03	Sub Slab		EPA TO-14A	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A photograph of a handwritten signature in black ink on a light-colored background. The signature is written in a cursive style and reads "Johanna K. Harrington".

Johanna K. Harrington
Manager, Laboratory Reporting

ANALYTICAL RESULTS

Project Location: Springfield St. School Complex.
 Date Received: 1/7/2016
Field Sample #: MS Front
Sample ID: 16A0185-01
 Sample Matrix: Sub Slab
 Sampled: 1/6/2016 12:06

Sample Description/Location:
 Sub Description/Location:
 Canister ID:
 Canister Size:
 Flow Controller ID:
 Sample Type:

Work Order: 16A0185
 Initial Vacuum(in Hg):
 Final Vacuum(in Hg):
 Receipt Vacuum(in Hg):
 Flow Controller Type:
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-14A

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analized		
Benzene	0.19	0.050		0.59	0.16	1	1/11/16 10:55	TPH	
Bromomethane	ND	0.050		ND	0.19	1	1/11/16 10:55	TPH	
Carbon Tetrachloride	0.10	0.050		0.64	0.31	1	1/11/16 10:55	TPH	
Chlorobenzene	ND	0.050		ND	0.23	1	1/11/16 10:55	TPH	
Chloroethane	ND	0.050		ND	0.13	1	1/11/16 10:55	TPH	
Chloroform	0.052	0.050		0.25	0.24	1	1/11/16 10:55	TPH	
Chloromethane	0.17	0.10		0.35	0.21	1	1/11/16 10:55	TPH	
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38	1	1/11/16 10:55	TPH	
1,2-Dichlorobenzene	ND	0.050		ND	0.30	1	1/11/16 10:55	TPH	
1,3-Dichlorobenzene	ND	0.050		ND	0.30	1	1/11/16 10:55	TPH	
1,4-Dichlorobenzene	0.18	0.050		1.1	0.30	1	1/11/16 10:55	TPH	
Dichlorodifluoromethane (Freon 12)	0.83	0.050		4.1	0.25	1	1/11/16 10:55	TPH	
1,1-Dichloroethane	ND	0.050		ND	0.20	1	1/11/16 10:55	TPH	
1,2-Dichloroethane	ND	0.050		ND	0.20	1	1/11/16 10:55	TPH	
1,1-Dichloroethylene	ND	0.050		ND	0.20	1	1/11/16 10:55	TPH	
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20	1	1/11/16 10:55	TPH	
1,2-Dichloropropane	ND	0.050		ND	0.23	1	1/11/16 10:55	TPH	
cis-1,3-Dichloropropene	ND	0.050		ND	0.23	1	1/11/16 10:55	TPH	
trans-1,3-Dichloropropene	ND	0.050		ND	0.23	1	1/11/16 10:55	TPH	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.40	0.050		2.8	0.35	1	1/11/16 10:55	TPH	
Ethylbenzene	0.066	0.050		0.29	0.22	1	1/11/16 10:55	TPH	
Hexachlorobutadiene	ND	0.050		ND	0.53	1	1/11/16 10:55	TPH	
Methylene Chloride	1.2	0.50		4.1	1.7	1	1/11/16 10:55	TPH	
Styrene	8.0	0.050		34	0.21	1	1/11/16 10:55	TPH	
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34	1	1/11/16 10:55	TPH	
Tetrachloroethylene	0.89	0.050		6.0	0.34	1	1/11/16 10:55	TPH	
Toluene	8.3	0.050		31	0.19	1	1/11/16 10:55	TPH	
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37	1	1/11/16 10:55	TPH	
1,1,1-Trichloroethane	ND	0.050		ND	0.27	1	1/11/16 10:55	TPH	
1,1,2-Trichloroethane	ND	0.050		ND	0.27	1	1/11/16 10:55	TPH	
Trichloroethylene	0.099	0.050		0.53	0.27	1	1/11/16 10:55	TPH	
Trichlorofluoromethane (Freon 11)	0.51	0.050		2.9	0.28	1	1/11/16 10:55	TPH	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.083	0.050		0.64	0.38	1	1/11/16 10:55	TPH	
1,2,4-Trimethylbenzene	0.14	0.050		0.68	0.25	1	1/11/16 10:55	TPH	
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25	1	1/11/16 10:55	TPH	
Vinyl Chloride	ND	0.050		ND	0.13	1	1/11/16 10:55	TPH	
m&p-Xylene	0.36	0.10		1.6	0.43	1	1/11/16 10:55	TPH	

ANALYTICAL RESULTS

Project Location: Springfield St. School Complex.
 Date Received: 1/7/2016
Field Sample #: MS Front
Sample ID: 16A0185-01
 Sample Matrix: Sub Slab
 Sampled: 1/6/2016 12:06

Sample Description/Location:
 Sub Description/Location:
 Canister ID:
 Canister Size:
 Flow Controller ID:
 Sample Type:

Work Order: 16A0185
 Initial Vacuum(in Hg):
 Final Vacuum(in Hg):
 Receipt Vacuum(in Hg):
 Flow Controller Type:
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-14A

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
o-Xylene	0.14	0.050		0.62	0.22	1	1/11/16	10:55	TPH
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	114			70-130			1/11/16	10:55	

ANALYTICAL RESULTS

Project Location: Springfield St. School Complex.
 Date Received: 1/7/2016
Field Sample #: ES #1
Sample ID: 16A0185-02
 Sample Matrix: Sub Slab
 Sampled: 1/6/2016 15:32

Sample Description/Location:
 Sub Description/Location:
 Canister ID:
 Canister Size:
 Flow Controller ID:
 Sample Type:

Work Order: 16A0185
 Initial Vacuum(in Hg):
 Final Vacuum(in Hg):
 Receipt Vacuum(in Hg):
 Flow Controller Type:
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-14A

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Benzene	0.33	0.050		1.0	0.16	1	1/11/16 11:34		TPH
Bromomethane	ND	0.050		ND	0.19	1	1/11/16 11:34		TPH
Carbon Tetrachloride	0.090	0.050		0.57	0.31	1	1/11/16 11:34		TPH
Chlorobenzene	ND	0.050		ND	0.23	1	1/11/16 11:34		TPH
Chloroethane	ND	0.050		ND	0.13	1	1/11/16 11:34		TPH
Chloroform	0.26	0.050		1.3	0.24	1	1/11/16 11:34		TPH
Chloromethane	1.1	0.10		2.3	0.21	1	1/11/16 11:34		TPH
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38	1	1/11/16 11:34		TPH
1,2-Dichlorobenzene	ND	0.050		ND	0.30	1	1/11/16 11:34		TPH
1,3-Dichlorobenzene	ND	0.050		ND	0.30	1	1/11/16 11:34		TPH
1,4-Dichlorobenzene	0.084	0.050		0.51	0.30	1	1/11/16 11:34		TPH
Dichlorodifluoromethane (Freon 12)	0.82	0.050		4.1	0.25	1	1/11/16 11:34		TPH
1,1-Dichloroethane	ND	0.050		ND	0.20	1	1/11/16 11:34		TPH
1,2-Dichloroethane	ND	0.050		ND	0.20	1	1/11/16 11:34		TPH
1,1-Dichloroethylene	ND	0.050		ND	0.20	1	1/11/16 11:34		TPH
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20	1	1/11/16 11:34		TPH
1,2-Dichloropropane	ND	0.050		ND	0.23	1	1/11/16 11:34		TPH
cis-1,3-Dichloropropene	ND	0.050		ND	0.23	1	1/11/16 11:34		TPH
trans-1,3-Dichloropropene	ND	0.050		ND	0.23	1	1/11/16 11:34		TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.22	0.050		1.6	0.35	1	1/11/16 11:34		TPH
Ethylbenzene	0.075	0.050		0.33	0.22	1	1/11/16 11:34		TPH
Hexachlorobutadiene	ND	0.050		ND	0.53	1	1/11/16 11:34		TPH
Methylene Chloride	0.69	0.50		2.4	1.7	1	1/11/16 11:34		TPH
Styrene	7.3	0.050		31	0.21	1	1/11/16 11:34		TPH
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34	1	1/11/16 11:34		TPH
Tetrachloroethylene	0.42	0.050		2.8	0.34	1	1/11/16 11:34		TPH
Toluene	7.1	0.050		27	0.19	1	1/11/16 11:34		TPH
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37	1	1/11/16 11:34		TPH
1,1,1-Trichloroethane	ND	0.050		ND	0.27	1	1/11/16 11:34		TPH
1,1,2-Trichloroethane	ND	0.050		ND	0.27	1	1/11/16 11:34		TPH
Trichloroethylene	0.15	0.050		0.82	0.27	1	1/11/16 11:34		TPH
Trichlorofluoromethane (Freon 11)	0.51	0.050		2.8	0.28	1	1/11/16 11:34		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.050		0.77	0.38	1	1/11/16 11:34		TPH
1,2,4-Trimethylbenzene	0.089	0.050		0.44	0.25	1	1/11/16 11:34		TPH
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25	1	1/11/16 11:34		TPH
Vinyl Chloride	ND	0.050		ND	0.13	1	1/11/16 11:34		TPH
m&p-Xylene	0.28	0.10		1.2	0.43	1	1/11/16 11:34		TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Springfield St. School Complex.
 Date Received: 1/7/2016
Field Sample #: ES #1
Sample ID: 16A0185-02
 Sample Matrix: Sub Slab
 Sampled: 1/6/2016 15:32

Sample Description/Location:
 Sub Description/Location:
 Canister ID:
 Canister Size:
 Flow Controller ID:
 Sample Type:

Work Order: 16A0185
 Initial Vacuum(in Hg):
 Final Vacuum(in Hg):
 Receipt Vacuum(in Hg):
 Flow Controller Type:
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-14A

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
o-Xylene	0.12	0.050		0.53	0.22	1	1/11/16	11:34	TPH
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	111			70-130			1/11/16	11:34	

ANALYTICAL RESULTS

Project Location: Springfield St. School Complex.
 Date Received: 1/7/2016
Field Sample #: ES #2
Sample ID: 16A0185-03
 Sample Matrix: Sub Slab
 Sampled: 1/6/2016 15:37

Sample Description/Location:
 Sub Description/Location:
 Canister ID:
 Canister Size:
 Flow Controller ID:
 Sample Type:

Work Order: 16A0185
 Initial Vacuum(in Hg):
 Final Vacuum(in Hg):
 Receipt Vacuum(in Hg):
 Flow Controller Type:
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-14A

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analized		
Benzene	0.28	0.050		0.89	0.16	1	1/11/16 12:13	TPH	
Bromomethane	ND	0.050		ND	0.19	1	1/11/16 12:13	TPH	
Carbon Tetrachloride	0.095	0.050		0.60	0.31	1	1/11/16 12:13	TPH	
Chlorobenzene	ND	0.050		ND	0.23	1	1/11/16 12:13	TPH	
Chloroethane	ND	0.050		ND	0.13	1	1/11/16 12:13	TPH	
Chloroform	0.26	0.050		1.3	0.24	1	1/11/16 12:13	TPH	
Chloromethane	1.0	0.10		2.1	0.21	1	1/11/16 12:13	TPH	
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38	1	1/11/16 12:13	TPH	
1,2-Dichlorobenzene	ND	0.050		ND	0.30	1	1/11/16 12:13	TPH	
1,3-Dichlorobenzene	ND	0.050		ND	0.30	1	1/11/16 12:13	TPH	
1,4-Dichlorobenzene	0.11	0.050		0.66	0.30	1	1/11/16 12:13	TPH	
Dichlorodifluoromethane (Freon 12)	0.87	0.050		4.3	0.25	1	1/11/16 12:13	TPH	
1,1-Dichloroethane	ND	0.050		ND	0.20	1	1/11/16 12:13	TPH	
1,2-Dichloroethane	ND	0.050		ND	0.20	1	1/11/16 12:13	TPH	
1,1-Dichloroethylene	ND	0.050		ND	0.20	1	1/11/16 12:13	TPH	
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20	1	1/11/16 12:13	TPH	
1,2-Dichloropropane	ND	0.050		ND	0.23	1	1/11/16 12:13	TPH	
cis-1,3-Dichloropropene	ND	0.050		ND	0.23	1	1/11/16 12:13	TPH	
trans-1,3-Dichloropropene	ND	0.050		ND	0.23	1	1/11/16 12:13	TPH	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.37	0.050		2.6	0.35	1	1/11/16 12:13	TPH	
Ethylbenzene	0.11	0.050		0.48	0.22	1	1/11/16 12:13	TPH	
Hexachlorobutadiene	ND	0.050		ND	0.53	1	1/11/16 12:13	TPH	
Methylene Chloride	0.58	0.50		2.0	1.7	1	1/11/16 12:13	TPH	
Styrene	7.3	0.050		31	0.21	1	1/11/16 12:13	TPH	
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34	1	1/11/16 12:13	TPH	
Tetrachloroethylene	2.7	0.050		19	0.34	1	1/11/16 12:13	TPH	
Toluene	7.3	0.050		28	0.19	1	1/11/16 12:13	TPH	
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37	1	1/11/16 12:13	TPH	
1,1,1-Trichloroethane	ND	0.050		ND	0.27	1	1/11/16 12:13	TPH	
1,1,2-Trichloroethane	ND	0.050		ND	0.27	1	1/11/16 12:13	TPH	
Trichloroethylene	0.76	0.050		4.1	0.27	1	1/11/16 12:13	TPH	
Trichlorofluoromethane (Freon 11)	0.72	0.050		4.0	0.28	1	1/11/16 12:13	TPH	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.083	0.050		0.64	0.38	1	1/11/16 12:13	TPH	
1,2,4-Trimethylbenzene	0.11	0.050		0.54	0.25	1	1/11/16 12:13	TPH	
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25	1	1/11/16 12:13	TPH	
Vinyl Chloride	ND	0.050		ND	0.13	1	1/11/16 12:13	TPH	
m&p-Xylene	0.40	0.10		1.7	0.43	1	1/11/16 12:13	TPH	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Springfield St. School Complex.
 Date Received: 1/7/2016
Field Sample #: ES #2
Sample ID: 16A0185-03
 Sample Matrix: Sub Slab
 Sampled: 1/6/2016 15:37

Sample Description/Location:
 Sub Description/Location:
 Canister ID:
 Canister Size:
 Flow Controller ID:
 Sample Type:

Work Order: 16A0185
 Initial Vacuum(in Hg):
 Final Vacuum(in Hg):
 Receipt Vacuum(in Hg):
 Flow Controller Type:
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-14A

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
o-Xylene	0.15	0.050		0.64	0.22	1	1/11/16	12:13	TPH
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	115			70-130			1/11/16	12:13	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-14A

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
16A0185-01 [MS Front]	B139731	1	1	N/A	1000	400	400	01/10/16
16A0185-02 [ES #1]	B139731	1	1	N/A	1000	400	400	01/10/16
16A0185-03 [ES #2]	B139731	1	1	N/A	1000	400	400	01/10/16

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B139731 - TO-15 Prep											
Blank (B139731-BLK1)											
						Prepared & Analyzed: 01/10/16					
Benzene	ND	0.035									
Bromomethane	ND	0.035									
Carbon Tetrachloride	ND	0.035									
Chlorobenzene	ND	0.035									
Chloroethane	ND	0.035									
Chloroform	ND	0.035									
Chloromethane	ND	0.070									
1,2-Dibromoethane (EDB)	ND	0.035									
1,2-Dichlorobenzene	ND	0.035									
1,3-Dichlorobenzene	ND	0.035									
1,4-Dichlorobenzene	ND	0.035									
Dichlorodifluoromethane (Freon 12)	ND	0.035									
1,1-Dichloroethane	ND	0.035									
1,2-Dichloroethane	ND	0.035									
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
1,2-Dichloropropane	ND	0.035									
cis-1,3-Dichloropropene	ND	0.035									
trans-1,3-Dichloropropene	ND	0.035									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035									
Ethylbenzene	ND	0.035									
Hexachlorobutadiene	ND	0.035									
Methylene Chloride	ND	0.35									
Styrene	ND	0.035									
1,1,1,2-Tetrachloroethane	ND	0.035									
Tetrachloroethylene	ND	0.035									
Toluene	ND	0.035									
1,2,4-Trichlorobenzene	ND	0.035									
1,1,1-Trichloroethane	ND	0.035									
1,1,2-Trichloroethane	ND	0.035									
Trichloroethylene	ND	0.035									
Trichlorofluoromethane (Freon 11)	ND	0.035									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.035									
1,2,4-Trimethylbenzene	ND	0.035									
1,3,5-Trimethylbenzene	ND	0.035									
Vinyl Chloride	ND	0.035									
m&p-Xylene	ND	0.070									
o-Xylene	ND	0.035									
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	8.80				8.00		110	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		
Batch B139731 - TO-15 Prep											
LCS (B139731-BS1)											
Prepared & Analyzed: 01/10/16											
Benzene	4.49				5.00		89.8	70-130			
Bromomethane	5.25				5.00		105	70-130			
Carbon Tetrachloride	4.72				5.00		94.4	70-130			
Chlorobenzene	4.97				5.00		99.3	70-130			
Chloroethane	5.33				5.00		107	70-130			
Chloroform	4.46				5.00		89.2	70-130			
Chloromethane	5.17				5.00		103	70-130			
1,2-Dibromoethane (EDB)	4.70				5.00		93.9	70-130			
1,2-Dichlorobenzene	5.40				5.00		108	70-130			
1,3-Dichlorobenzene	5.61				5.00		112	70-130			
1,4-Dichlorobenzene	5.57				5.00		111	70-130			
Dichlorodifluoromethane (Freon 12)	5.49				5.00		110	70-130			
1,1-Dichloroethane	4.22				5.00		84.5	70-130			
1,2-Dichloroethane	4.33				5.00		86.5	70-130			
1,1-Dichloroethylene	4.32				5.00		86.5	70-130			
cis-1,2-Dichloroethylene	4.12				5.00		82.4	70-130			
1,2-Dichloropropane	4.33				5.00		86.6	70-130			
cis-1,3-Dichloropropene	4.39				5.00		87.8	70-130			
trans-1,3-Dichloropropene	4.32				5.00		86.5	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	5.57				5.00		111	70-130			
Ethylbenzene	5.09				5.00		102	70-130			
Hexachlorobutadiene	6.06				5.00		121	70-130			
Methylene Chloride	4.65				5.00		93.1	70-130			
Styrene	3.95				5.00		79.0	70-130			
1,1,1,2-Tetrachloroethane	5.02				5.00		100	70-130			
Tetrachloroethylene	4.43				5.00		88.5	70-130			
Toluene	4.73				5.00		94.6	70-130			
1,2,4-Trichlorobenzene	5.93				5.00		119	70-130			
1,1,1-Trichloroethane	4.49				5.00		89.7	70-130			
1,1,2-Trichloroethane	4.69				5.00		93.9	70-130			
Trichloroethylene	4.46				5.00		89.2	70-130			
Trichlorofluoromethane (Freon 11)	4.95				5.00		99.0	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.80				5.00		96.0	70-130			
1,2,4-Trimethylbenzene	4.84				5.00		96.7	70-130			
1,3,5-Trimethylbenzene	4.69				5.00		93.8	70-130			
Vinyl Chloride	4.95				5.00		99.0	70-130			
m&p-Xylene	10.3				10.0		103	70-130			
o-Xylene	5.01				5.00		100	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	9.02				8.00		113	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-14A in Air</i>	
Benzene	AIHA,FL,NY
Bromomethane	AIHA,FL,NY
Carbon Tetrachloride	AIHA,FL,NY
Chlorobenzene	AIHA,FL,NY
Chloroethane	AIHA,FL,NY
Chloroform	AIHA,FL,NY
Chloromethane	AIHA,FL,NY
1,2-Dibromoethane (EDB)	NY
1,2-Dichlorobenzene	AIHA,FL,NY
1,3-Dichlorobenzene	AIHA,FL,NY
1,4-Dichlorobenzene	AIHA,FL,NY
Dichlorodifluoromethane (Freon 12)	AIHA,FL,NY
1,1-Dichloroethane	AIHA,FL,NY
1,2-Dichloroethane	AIHA,FL,NY
1,1-Dichloroethylene	AIHA,FL,NY
cis-1,2-Dichloroethylene	AIHA,FL,NY
1,2-Dichloropropane	AIHA,FL,NY
cis-1,3-Dichloropropene	AIHA,FL,NY
trans-1,3-Dichloropropene	NY
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,FL,NY
Ethylbenzene	AIHA,FL,NY
Hexachlorobutadiene	AIHA,FL,NY
Methylene Chloride	AIHA,FL,NY
Styrene	AIHA,FL,NY
1,1,2,2-Tetrachloroethane	AIHA,FL,NY
Tetrachloroethylene	AIHA,FL,NY
Toluene	AIHA,FL,NY
1,2,4-Trichlorobenzene	AIHA,FL,NY
1,1,1-Trichloroethane	AIHA,FL,NY
1,1,2-Trichloroethane	AIHA,FL,NY
Trichloroethylene	AIHA,FL,NY
Trichlorofluoromethane (Freon 11)	AIHA,FL,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY
1,2,4-Trimethylbenzene	AIHA,FL,NY
1,3,5-Trimethylbenzene	AIHA,FL,NY
Vinyl Chloride	AIHA,FL,NY
m&p-Xylene	AIHA,FL,NY
o-Xylene	AIHA,FL,NY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



Phone: 413-525-2332
 Fax: 413-525-6405
 Email: info@contestlabs.com
 www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 SPRUCE ST, 2ND FLOOR
 EAST LONGMEADOW, MA 01028

Company Name: ARCADIS
 Address: 300 MERRID CENTER
BLVD, WARWICK, RI 02886
 Attention: DOMMA PALLISTER
 Project Location: SPRINGFIELD STREET, APT. R1
 Sampled By: K. Adair, J.A. Lewis

Telephone: (401) 738-3887
 Project # WK012152.0010
 Client PO # _____

DATA DELIVERY (check one):
 FAX EMAIL WEBSITE CLIENT
 Fax #: _____
 Email: _____
 Format: EXCEL PDF GIS KEY
 OTHER _____

Proposal Provided? (For Billing purposes) yes no
 State Form Required? yes no

Field ID	Sample Description	Lab #	Date Sampled		Comp- osite	Grab	*Matrix Conc. Code Code	ANALYSIS REQUESTED	# of containers
			Start Date/Time	Stop Date/Time					
	NS FRONT	001	1/6/15	1206		1	SS -	1	
	ES #1	002	↓	1532		1	SS -	1	
	ES #2	003	↓	1537		1	SS -	1	
<div style="font-size: 2em; font-weight: bold; opacity: 0.5;">JAL</div>									

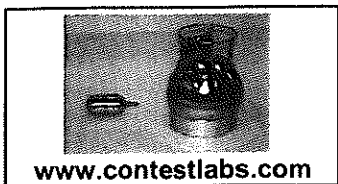
Laboratory Comments: _____

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) <u>[Signature]</u>	Date/Time: 1/6/15 17:25	Turnaround ** <input type="checkbox"/> 7-Day <input type="checkbox"/> 10-Day <input checked="" type="checkbox"/> Other <u>SLD</u>	Detection Limit Requirements Regulations? _____ Data Enhancement Project/RCP? <input type="checkbox"/> Y <input type="checkbox"/> N Special Requirements or DL's: _____
Received by: (signature) <u>[Signature]</u>	Date/Time: 11:30	RUSH* <input type="checkbox"/> *24-Hr <input type="checkbox"/> *48-Hr <input type="checkbox"/> *72-Hr <input type="checkbox"/> *4-Day	**Preservation Codes: I = Iced X = Na hydroxide H = HCL T = Na thiosulfate M = Methanol N = Nitric Acid S = Sulfuric Acid B = Sodium bisulfate O = Other
Relinquished by: (signature) <u>[Signature]</u>	Date/Time: 1/7/16	* Require lab approval	*Matrix Code: GW = groundwater WW = wastewater DW = drinking water A = air S = soil/solid SL = sludge O = other
Received by: (signature) <u>[Signature]</u>	Date/Time: 1/7/16		
Relinquished by: (signature) <u>[Signature]</u>	Date/Time: 1/7/16		

URNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS
 CORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified



39 Spruce St.
 East Longmeadow, MA.
 01028
 P: 413-525-2332
 F: 413-525-6405

AIR Only Receipt Checklist

CLIENT NAME: Acaudis RECEIVED BY: VP DATE: 1/7/16

- 1) Was the chain(s) of custody relinquished and signed? Yes No
- 2) Does the chain agree with the samples? Yes No
 If not, explain:
- 3) Are all the samples in good condition? Yes No
 If not, explain:
- 4) Are there any samples "On Hold"? Yes No Stored where:
- 5) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

6) Location where samples are stored: Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

7) Number of cans Individually Certified or Batch Certified? _____

Containers received at Con-Test		
	# of Containers	Types (Size, Duration)
Summa Cans (TO-14/TO-15/APH)		
Tedlar Bags	3	
TO-17 Tubes		
Regulators		
Restrictors		
Hg/Hopcalite Tube (NIOSH 6009)		
(TO-4A/ TO-10A/TO-13) PUFs		
PCB Florisil Tubes (NIOSH 5503)		
Air cassette		
PM 2.5/PM 10		
TO-11A Cartridges		
Other		

Unused Summas/PUF Media:

Unused Regulators:

- 1) Was all media (used & unused) checked into the WASP?
- 2) Were all returned summa cans, Restrictors & Regulators and PUF's documented as returned in the Air Lab Inbound/Outbound Excel Spreadsheet?

Laboratory Comments:

Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy)
Any False statement will be brought to the attention of Client

Question	Answer (True/False)		Comment
	T	F/NA	
1) The coolers'/boxes' custody seal, if present, is intact.		NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) Samples are received within Holding Time.	T		
10) Sample containers have legible labels.	T		
11) Containers/media are not broken or leaking and valves and caps are closed tightly.	T		
12) Sample collection date/times are provided.	T		
13) Appropriate sample/media containers are used.	T		
14) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
15) Trip blanks provided if applicable.		NA	

Doc #278 Rev. 5 October 2014

Who notified of False statements?

Log-In Technician Initials: XVP VP

Date/Time:

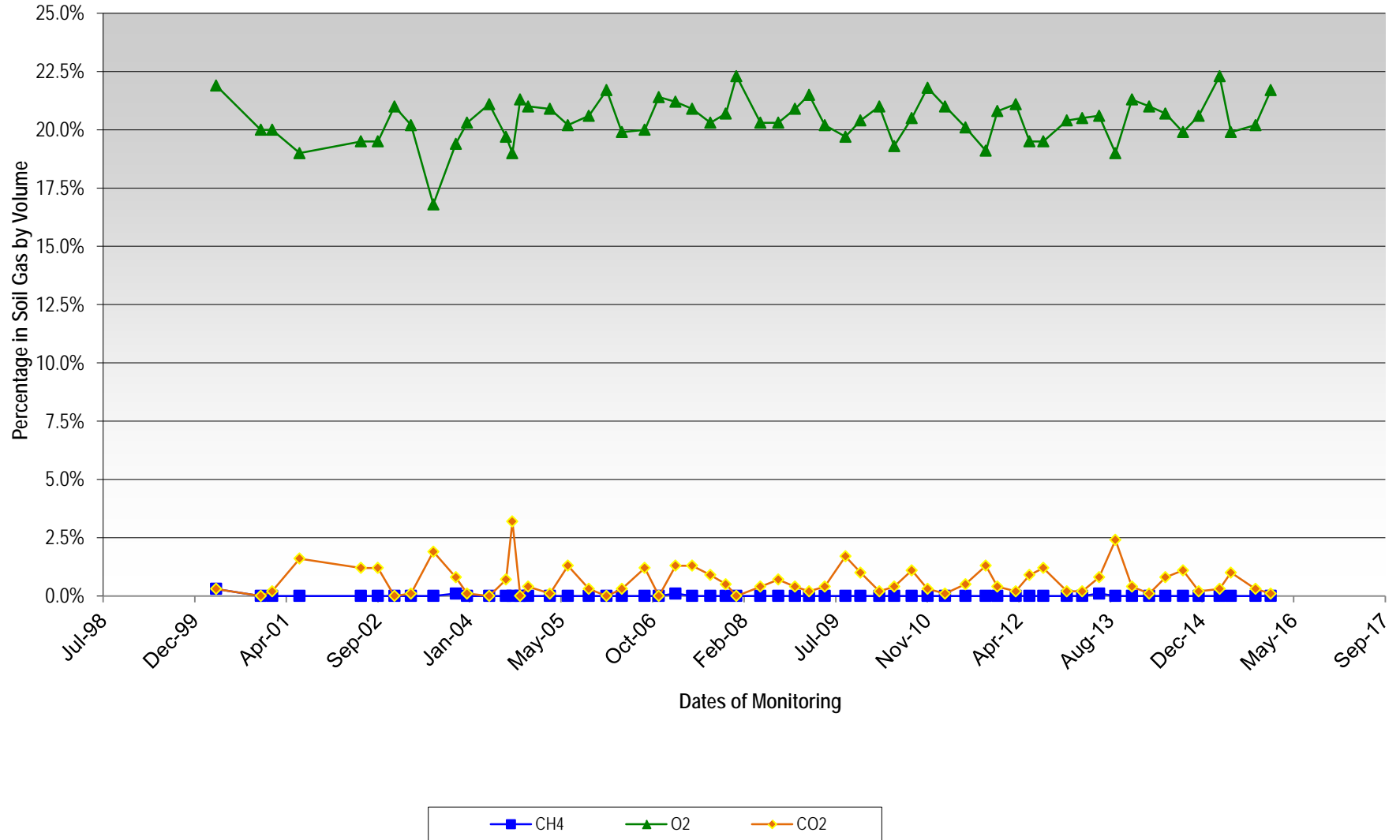
Date/Time: 1/7/16
1730

ATTACHMENT C

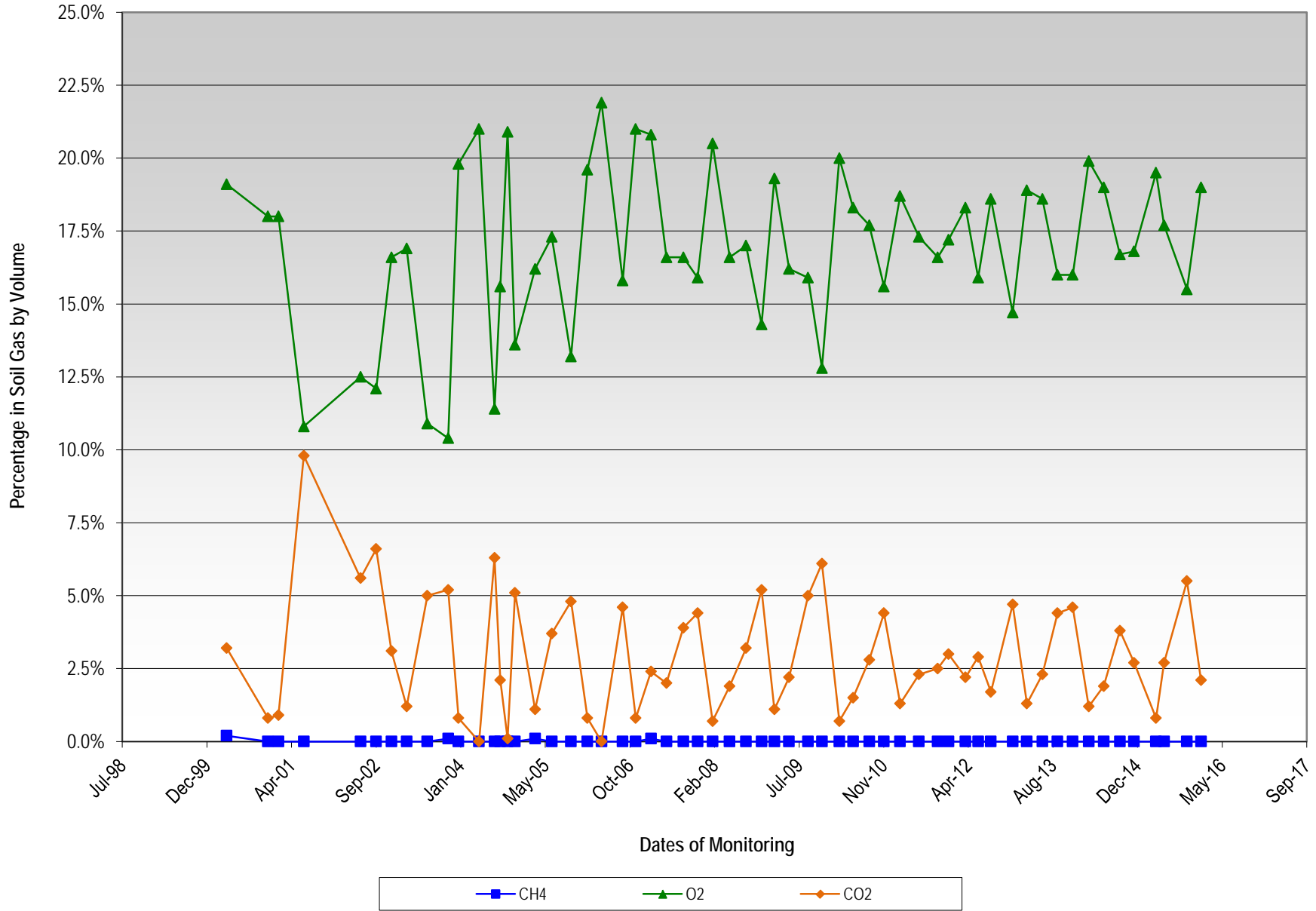
Soil Gas Trends



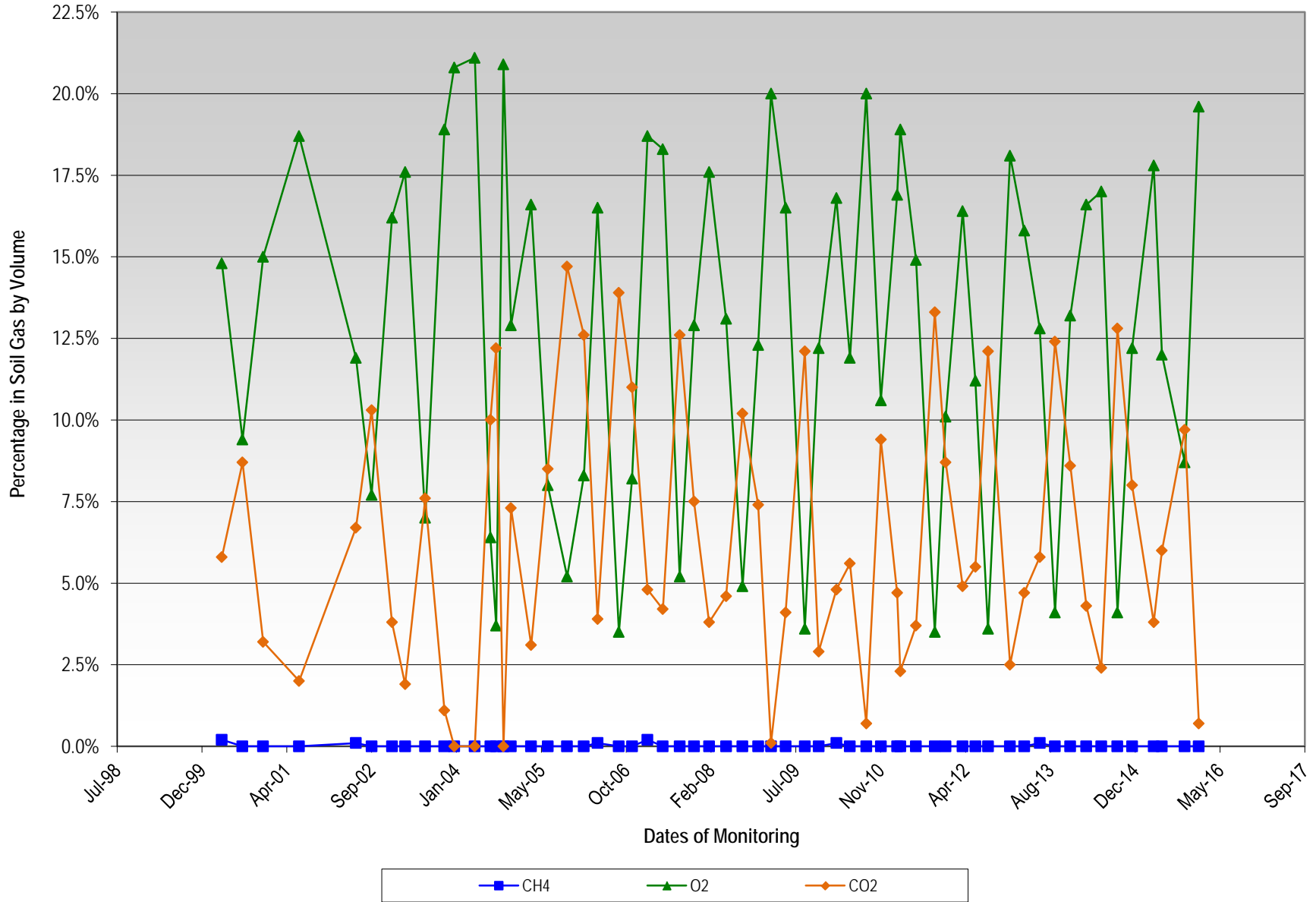
Soil Gas Well EPL1
Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
Springfield Street School Complex
Providence, Rhode Island



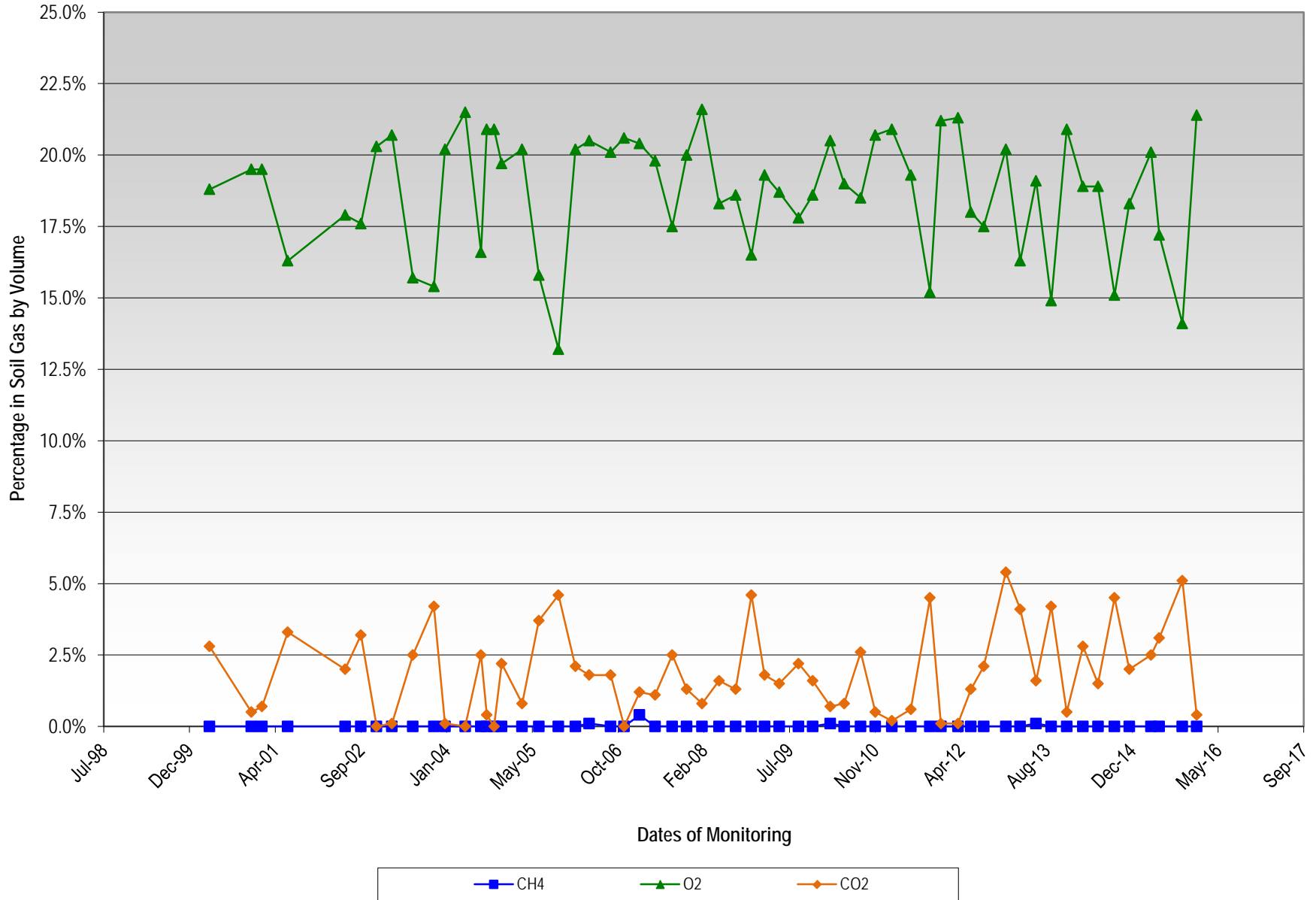
Soil Gas Well EPL4
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



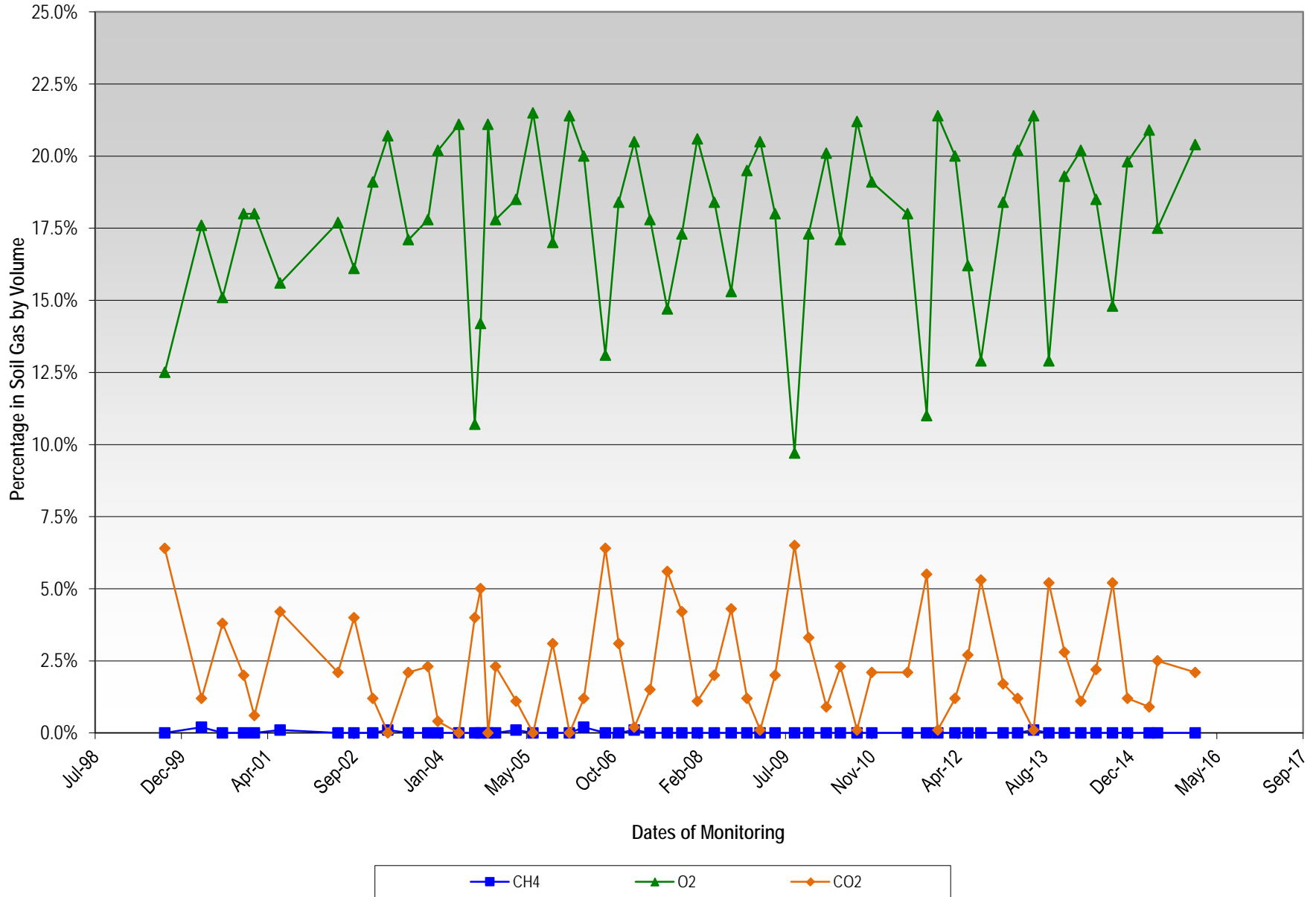
Soil Gas Well MPL5
Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
Springfield Street School Complex
Providence, Rhode Island



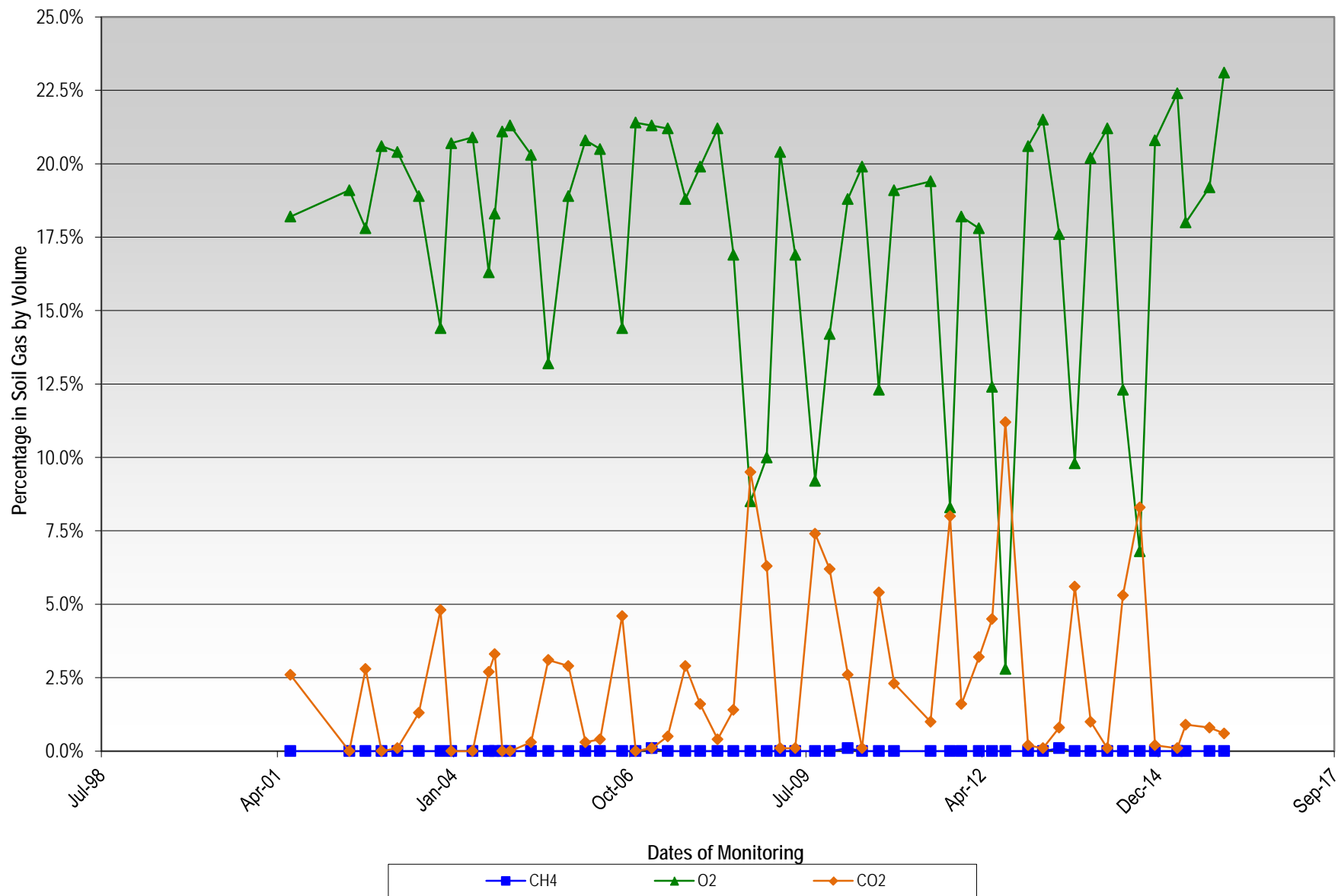
Soil Gas Well MG2
Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
Springfield Street School Complex
Providence, Rhode Island



Soil Gas Well WB1
Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
Springfield Street School Complex
Providence, Rhode Island



Soil Gas Well WB15
Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
Springfield Street School Complex
Providence, Rhode Island



Soil Gas MPL 7
Fluctuation in Methane, Oxygen, Carbon Dioxide Percentages over Time
Springfield Street School Complex
Providence, Rhode Island

